

# The Mining Journal

## RAILWAY AND COMMERCIAL GAZETTE

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

[The Mining Journal is Registered at the General Post Office as a Newspaper, and for Transmission Abroad.]

No. 2010.—VOL. XLIV.

LONDON, SATURDAY, FEBRUARY 28, 1874.

WITH SUPPLEMENT. PRICE FIVEPENCE. PER ANNUM, BY POST, £1 4s.

### MR. JAMES CROFTS, STOCK AND SHARE BROKER,

No. 1, FINCH LANE, CORNHILL, LONDON, E.C.  
(ESTABLISHED 1842).  
BUSINESS transacted in every description of BRITISH and FOREIGN Stocks and Shares, and in all COLLIERIES and IRON SHARES.  
SPECIAL BUSINESS in shares not having a general market value.  
Loans negotiated upon marketable Mining Shares and other approved Stocks.  
The principal mining papers filed every week. A Price List issued every evening at Five o'clock.

UNITED BITUMINOUS are recommended for purchase. The Fire-brick Department is now in full working order, and very remunerative shares are being made. The Weig Colliery is opening out well. Higher dividends may be looked for. For sale, 50 shares.

BUSINESS also in Cardiff and Swansea, Cleve Hill, Littledean Woodside, Newport Abercarn, New Sharlston, Welsh Freehold, and other Colliery Shares.  
SPECIAL BUSINESS in Emma, Flagstaff, Last Chance, Malabar, Malpas, Old Treburgett, Tecoma, Van Consols.

### MR. W. H. BUMPUS, STOCK AND SHARE DEALER,

44, THREADNEEDLE STREET, LONDON, E.C., has FOR SALE the following SHARES, free of commission:—

|                              |                           |                                   |
|------------------------------|---------------------------|-----------------------------------|
| 100 Aberdunant, 5s. 6d.      | 100 Frontino, 6s.         | 30 South Prince Patrick, 25s. 6d. |
| 30 All-y-Crib, 11s. 6d.      | 10 Great Laxey, £11½.     | 70 South Aurora, 16s. 3d.         |
| 25 Almada, 18s. 3d.          | 25 Great West Van, 35s.   | 20 South Roskear, 20s.            |
| 40 Bog, 15s.                 | 40 Hingston Down, 30s.    | 60 So. Rom. Grav., 19s.           |
| 100 Bampfyde, 40s.           | 50 Ladywell, £2½.         | 10 So. Condurrow, £3½.            |
| 50 Boscaas Downs, 10s.       | 30 Lovell (Tin), £2½.     | 2 Tincroft, £25.                  |
| 25 Birdseye Creek, £3 3 9    | 100 Last Chance, 21s.     | 90 Tecoma, 16s. 6d.               |
| 70 Chontales, 17s. 6d.       | 50 Marke Valley, 19s.     | 10 Tankerville, £9 1s. 3d.        |
| 100 Cwm Elan, 3s. 6d.        | 100 Malpas, 20s. 6d.      | 50 Tylwyd, 25s.                   |
| 50 Cleve Hill Colliery, 15s. | 100 Malabar, 15s.         | 50 Utah (fully paid), 35s.        |
| 20 Cedar Creek, £2½.         | 75 New Pacific, 10s.      | 10 Van, £21.                      |
| 2 Carn Brea, £37½.           | 40 New Quebrada, £4 3 9   | 25 Van Consols, £3½.              |
| 25 Colorado Terrible, 40s.   | 40 Old Treburgett, 20s.   | 50 W. Godolphin, 32s. 6d.         |
| 15 Cape Copper, £28½.        | 100 Plynlimmon, 5s. 9d.   | 25 Wheal Grenville, £4.           |
| 1 Dolcoath, £37½.            | 70 Penrithal, 17s.        | 20 Wheal Crebor, £3½.             |
| 30 Drake Walls, 25s.         | 40 Perkins Beach, 6s. 9d. | 40 Wh. Mary Hutchings, £3½.       |
| 50 Don Pedro, 11s. 6d.       | 25 Pennerley, £2.         | 60 Wheal Agar, 25s.               |
| 50 Emma (Silver), 6d.        | 75 Rookhope, 20s. 6d.     | 20 Wheal Ury, £2½.                |
| 15 East Lovell, £10½.        | 15 Roman Grav., £16½.     | 30 Wheal Pevor, 30s.              |
| 75 Eberhardt, £3½.           | 150 Rica (Gold), 11s.     | 50 W. Tankerville, £2½.           |
| 40 East Van, 25s. 6d.        | 50 Richmond, £5 18s. 9d.  | 5 W. Chiverton, £5½.              |
| 40 East Caradon, 17s. 6d.    | 2 South Caradon, £62½.    |                                   |
| 20 Fortuna, £5½.             | 25 Sweetland, £5½.        |                                   |

London Office of Reference for Drake Walls and South Roskear Mines.

W. H. B. transacts business in every description of stocks and shares at the best market prices, and free of commission.

Bankers: National Provincial Bank of England, E.C.

### MR. E. J. BARTLETT, STOCK AND SHARE DEALER,

No. 30, GREAT ST. HELEN'S, LONDON, E.C., transacts business at net prices in every description of security.

Post free, Sixpence.

### INVESTMENTS FOR 1874—A SAFE SELECTION.—

Published by E. J. BARTLETT.

30, Great St. Helen's, London, E.C.

### MR. JOHN RISLEY (SWORN), STOCK AND SHARE BROKER,

77, CORNHILL, LONDON, E.C.

Specially recommends the purchase of shares in WHEAL CREBOR, TRELEIGH WOOD, OLD TREBURGETT (Preference Shares), and WHEAL GRENVILLE MINES.

The latest reports of the above mines forwarded on application.

Brokerage on Buying or Selling shares of £4 and upwards, 1½ per cent., and 1s. per share on each under £4.

### FERDINAND R. KIRK, STOCK BROKER,

5, BIRCHIN LANE, E.C.

UNITED BITUMINOUS should be bought since the current earnings from coal, coke, and fire-are are largely increasing; and the Weig Colliery will soon swell the returns.

FOR SALE—35 United Bituminous, 10 Welsh Freehold, 15 Cardiff and Swansea, 10 Dunraven-Adare, 30 Whitehaven Iron.

The following colliery shares may be bought with advantage—Cardiff and Swansea, West Mostyn, Welsh Freehold, and Newport Abercarn. Further particulars if required.

SPECIAL BUSINESS in Flagstaff, Last Chance, Cedar Creek, Tecoma, Tylwyd, Emma, and Richmond.

All Colliery and Iron Shares dealt in, whether quoted or not.

Bankers: London and Westminster, and City Bank.

### MR. WILLIAM WARD

(Late WARD AND LITTLEWOOD).

CROSBY HOUSE, 96, BISHOPSGATE STREET WITHIN, E.C.

DEALS IN ALL KINDS OF STOCKS AND SHARES, for cash or the account.

### MR. HENRY MANSELL, STOCK AND SHARE DEALER,

14, GREAT WINCHESTER STREET, LONDON, E.C.

H. M. recommends the purchase of COLORADO TERRIBLE shares.

### MR. THOMAS THOMPSON, JUN., 1, PALMERSTON BUILDINGS, BISHOPSGATE STREET, LONDON, E.C.

Some valuable hints as to the purchase of mining shares will be found in Mr. Thompson's "Investment Circular" for February now ready, post free, price 6d.

### MR. W. TREGELLAS, 122, BISHOPSGATE STREET WITHIN, E.C.

Deals in all descriptions of Stocks and Shares at close market prices.

### MESSRS. ENDEAN AND CO., STOCK AND SHARE DEALERS,

85, GRACECHURCH STREET, LONDON, E.C.

Government and every negotiable Stocks dealt in for cash or account. Orders and telegrams punctually attended to.

We advise immediate application and purchase of the BAMPFYLDE and LLANRWST shares. A rise in price is inevitable.

### MESSRS. WM. MARLBOROUGH AND CO.,

20, BISHOPSGATE STREET WITHIN, LONDON, E.C. (Established 18 years), have FOR SALE the following SHARES at prices annexed:—

|                                       |                             |                                   |
|---------------------------------------|-----------------------------|-----------------------------------|
| 100 All-y-Crib (offer wd.), 20s.      | 20 Flagstaff, £2 16s. 3d.   | 20 Sweetland, £25.                |
| 5 Anglo-American Telegraph, £50½ x d. | 30 Great West Van, 35s.     | 30 Carn Brea, £2½.                |
| 50 Bog, 14s.                          | 20 Great Vor, 17s. 6d.      | 50 So. Condurrow, £3½.            |
| 45 Birdseye Creek, £3½.               | 20 Hingston, 29s.           | 45 South Tolcarne, 10s.           |
| 50 Boscaaswell Downs, 10s.            | 5 Herodsfoot, £4½.          | 50 Tecoma, 16s. 6d.               |
| 75 Cedar Creek, £2 3s. 9d.            | 75 Last Chance, 20s.        | 5 Tincroft, £25.                  |
| 5 Cape Copper, £28½.                  | 50 Ladywell, £2½.           | 70 Tylwyd, 30s.                   |
| 3 Carn Brea, £37½.                    | 50 Malpas, 20s. 6d.         | 25 Utd. Bituminous Colliery, 25s. |
| 80 Colorado, £3 11s. 3d.              | 25 Malabar, 15s.            | 40 Van Consols.                   |
| 10 Cook's Kitchen, £4½.               | 70 New Dolcoath, 20s.       | 30 Cardiff and Swansea.           |
| 50 Cleve Hill Colliery, 15s.          | 50 New Quebrada, £4½.       | 30 Chango (Ed. J.), £5½.          |
| 3 Dolcoath, £34½.                     | 50 New Rosario, 17s. 6d.    | 50 Chontales, 17s.                |
| 15 East Pool, £5½.                    | 70 Old Treburgett, 20s.     | 50 Cwm Elan, 3s. 6d.              |
| 50 Eberhardt, £3½.                    | 50 Pennerley, £1 16s. 3d.   | 10 W. Chiverton, £5½.             |
| 40 East Lovell, £10½.                 | 40 Prince of Wales, 5s. 9d. | 30 Wh. Grenville, £3 18 9         |
| 50 Emma, £2½.                         | 25 Perkins Beach, 7s.       | 10 Wheal Basset, £18½.            |
| 50 East Basset, 40s.                  | 25 Richmond, £5 18s. 3d.    | 10 Wheal Crebor, £3½.             |
| 40 Rosewall Hill, 15s. 6d.            | 10 Roman Gravels, £16½.     | 25 West Frances, £6½.             |
| 20 Rookhope, 19s. 6d.                 | 40 Rosewall Hill, 15s. 6d.  | 20 W. Esqair Lie, £3½.            |

### MR. GEORGE BUDGE, STOCK AND SHARE DEALER,

No. 4, ROYAL EXCHANGE BUILDINGS, LONDON, E.C. (Established 24 years), has SPECIAL BUSINESS in the following:—

|                          |  |
|--------------------------|--|
| 100 Old Treburgett, 20s. | 30 Minera; 50 Great Retallack; 3 South Caradon; 40 South Llanfyllid; 80 Ladywell; 50 East Chiverton; 200 United Bituminous; 50 Wheal Coates; 100 Wheal Grenville; 75 Penrithal; 115 Wheal Mary; 3 Dolcoath; 100 Hingston Down; 5 Great Laxey; 30 Wheal Pevor; 20 West Gwynn; 20 Wheal Trebor; 150 Plynlimmon; 4 South Caradon; 5 Roman Gravels; 35 Marke Valley; 35 West Chiverton; 100 Prince of Wales, 5s. 9d.; 100 Crenver and Wheal Abraham (30s. paid); 30 South Condurrow; 10 Wheal Kitty (St. Agnes); 200 All-y-Crib; 50 Medlyn Moor; 15 Wheal Ury; 55 Bampfyde; 300 Gwydyr Park; 100 East Grenville; 50 Englefield Colliery (fully paid); 250 New Pacific; 200 Frontino and Bolivia; 300 Exchequer; 100 Birdseye Creek; 200 Gold Run; 5 Newfoundland; 300 Yudanamatana; 50 Tecoma; 50 New Quebrada; 100 South Aprora; 200 Mammoth Copperopolis; 90 Chicago; 300 Emma; 25 Sweetland Creek; 150 I.X.L.; 200 New Rosario; 150 General Brazilian; 100 Alamillos. |
|--------------------------|--|

### INVESTMENT OR SPECULATION.—A SELECTED LIST

OF RAILWAYS, BANKS, MINES, COLLIERIES, COLONIAL SECURITIES, FOREIGN GOVERNMENT BONDS, &c., forwarded to bona fide investors on application. In addition to the high rate of interest many of the above are paying, there is now every probability of a great rise in market value.

P. WATSON, STOCK AND SHARE DEALER, 79, OLD BROAD STREET, LONDON.

(Three doors only from Hercules-passage, entrance to the Stock Exchange.)

Twenty-nine years' experience.

Bankers: The Alliance Bank, and the Union Bank of London.

References given and required (when necessary) in all the principal towns of the United Kingdom.

### MR. T. E. W. THOMAS, SWORN SHARE BROKER,

3, GREAT WINCHESTER STREET BUILDINGS, E.C.

Established 1857.

Mr. THOMAS is in receipt of regular and reliable information from the seat of mining operations in Utah, which is at the service of clients.

### McKENNA & CO., STOCK AND SHARE BROKERS,

5, UNION COURT, OLD BROAD STREET, E.C.

### BARTLETT AND CHAPMAN, FINCH LANE BUILDINGS, LONDON, E.C., STOCK AND SHARE DEALERS.

Before investing, read our publications:—

"Handy Book for Investors" (third edition), price 10s. 6d.

"British Mines and Mining," price 2s. 6d.

"Investors' Directory," price 1s. 6d.

The "Investment and Financial Record," will be sent FREE on application.

Bankers: London and Westminster.

### MAUDSLAY AND CO., STOCK AND SHARE BROKERS,

3, CRAVEN-STREET, STRAND, LONDON, AND ST. AUSTELL, CORNWALL, transact business in all Stocks, Shares, and Miscellaneous Securities, at close market prices.

MAUDSLAY AND CO., having a branch establishment in the heart of Cornwall, can furnish the earliest information of discoveries in mines, enabling their clients to anticipate the rise in price of shares.

MAUDSLAY AND CO.'S Monthly Reflex upon Mines and Mining and Financial and Miscellaneous Undertakings should be consulted by all Investors. Forwarded free for two stamps, on application to 3, Craven-street, Strand, London.

### TYLLWYD SILVER-LEAD MINE.

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255 and 256, Gresham House, Old Broad-street, E.C.

### MESSRS. W. DUNN AND CO., STOCK AND SHARE DEALERS,

3 AND 4, GREAT WINCHESTER STREET BUILDINGS, LONDON, E.C.

Orders received and commissions executed.

Bankers: National Provincial Bank of England.

W. D. and Co. have FOR SALE the following at net prices:—

|                                  |                                 |                    |
|----------------------------------|---------------------------------|--------------------|
| 20 Lovell (Tin), 10s.            | 10 So. Condurrow, £3½.          | 1 West Seton, £10. |
| 50 New Dolcoath, 100 Tylwyd, £1. | 5 W. Kitty (St. Agnes), £8 10s. |                    |
| 20 Rookhope, £1 1s.              | 100 Utd. Bituminous, £1 5       |                    |

### MR. E. CHARTERS, 8, CRAIG'S COURT, CHARING CROSS, LONDON, has the FOLLOWING SHARES, free of commission:—

|                              |                             |                             |
|------------------------------|-----------------------------|-----------------------------|
| 50 Almada, 15s. 6d.          | 100 Gawn, 10s. 6d.          | 70 Plynlimmon, 6s. 6d.      |
| 10 Australian, £2.           | 10 Great Laxey, £11½.       | 60 Parys Mount, 7s. 6d.     |
| 10 Bellas, 6s.               | 10 Groswinton, £2½.         | 70 Prince of Wales, 5s. 6d. |
| 80 Bamflet, £2½.             | 60 Gt. West Van, 30s.       | 10 Roman Gravels, £15.      |
| 50 Boscaaswell, 9s. 3d.      | 70 Gold Run, 4s. 6d.        | 30 Richmond, £5½.           |
| 50 Chicago, offer wanted.    | 50 Herodsfoot, £4.          | 25 Rookhope, 19s.           |
| 10 Cape Copper, £28½.        | 20 Hingston Down, £13½.     | 50 So. Carn Brea, £2½.      |
| 2 Carn Brea, £40.            | 30 Ladywell, £2½.           | 40 So. Rom. Grav., 19s.     |
| 70 Cleve Hill Col., 14s. 9d. | 50 Last Chance, £1.         | 30 Dennis Consols, £2       |
| 60 Cwm Elan, 3s. 6d.         | 70 Malpas, £1.              | 20 Sweetland, £4½.          |
| 5 Dolcoath, £36.             | 60 New Dolcoath, 19s. 6d.   | 10 Tincroft, £30½.          |
| 80 Don Pedro, 12s. 6d.       | 70 New Quebrada, £4.        | 10 Van Consols, £3.         |
| 50 Emma, £2½.                | 70 New Pacific, 10s. 9d.    | 25 Wheal Crebor, £3.        |
| 10 Eberhardt, £3½.           | 30 Pennerley, £2.           | 20 Wheal Tregoes, £1.       |
| 30 Flagstaff, £2½.           | 40 Old Batholles, 10s. 6d.  | 80 West Maria, 3s. 6d.      |
| 10 Fortuna, £5.              | 20 Old Treburgett, 18s. 6d. | 10 Wh. Grenville, £5.       |
|                              | 40 Oola Hills, £1.          | 20 Wheal Mary.              |

### MESSRS. A. ENDEAN, FISHER AND CO., STOCK AND SHARE DEALERS,

32, NEW BROAD STREET, E.C.

Bankers: London and Westminster, Lothbury.

### MESSRS. W. A. CARR AND CO.,

STOCK AND SHARE BROKERS,

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Consols, Foreign Stocks, Railways, Mining Shares, and every Security quoted in the London Stock Exchange or Mining Market Bought and Sold.

Speculative accounts opened for the fortnightly settlement.

Scale of Commissions on application.

### MESSRS. MILLER AND CO., STOCK AND SHARE DEALERS,

65, BISHOPSGATE WITHIN, LONDON, E.C. PUBLISH A DAILY and WEEKLY LIST of Prices of Funds, Government Securities, Banks, Railways (some am and foreign), Mines, Docks, Gas, Telegraph, Waterworks, and miscellaneous companies shares.

All orders punctually attended to, for cash or account.

Bankers: Prescott, Grote, Cave, and Co., Threadneedle-street, London, E.C.

### MESSRS. W. J. TALLENTIRE AND CO., STOCK AND SHARE DEALERS,

20, CHANGE ALLEY, CORNHILL, LONDON, E.C., transact business in Stock Exchange Securities and Mining Shares of every description.

A Selected List of Safe Investments forwarded to intending investors post free upon application. Fourteen years' experience.

### MR. JAMES STOCKER, STOCK AND SHARE DEALER,

SPECIAL BUSINESS in the following:—

|                              |                              |                              |
|------------------------------|------------------------------|------------------------------|
| 20 Almada, 15s. 6d.          | 100 Gold Run, 5s.            | 25 So. Condurrow, £3½.       |
| 35 All-y-Crib, 10s. 6d.      | 35 Groswinton, £2½.          | 50 South Aurora, 15s. 6d.    |
| 100 Bampfyde, 40s.           | 20 Great Laxey, £11½.        | 35 So. Carn Brea, 43s. 9d.   |
| 45 Birdseye, £3 3s. 9d.      | 35 Hingston, 28s. 9d.        | 25 Silkstone Fall.           |
| 50 Bog, 16s.                 | 45 Ladywell, £2½.            | 30 Sweetland, £5 1s. 3d.     |
| 150 Boscaaswell Downs, 10s.  | 25 Last Chance, £28s. 9d.    | 100 Thornhill Reef, 35s. 9d. |
| 45 Blue Tent, £4½.           | 10 Lovell (Tin), £2½.        | 100 Tecoma, 19s.             |
| 2 Carn Brea, £31½.           | 65 Malabar, 11s. 6d.         | 100 Tylwyd, 26s.             |
| 30 Cardiff and Swansea.      | 75 Malpas, 20s. 6d.          | 25 Tankerville, £9.          |
| 90 Chango (Ed. J.), £5½.     | 30 Marke Valley, 17s. 6d.    | 4 Tincroft, £24.             |
| 50 Chontales, 17s.           | 35 Merry & Cunningham        | 50 Utd. Bituminous, 23s. 6   |
| 80 Cwm Elan, 3s.             | 40 Mynydd Iron.              | 50 Utah, 20s.                |
| 10 Cook's Kitchen, £4½.      | 85 New Pacific, 7s. 9d.      | 70 Van Consols, £3 6s. 3d.   |
| 70 Cedar Creek, 41s. 9d.     | 100 New Dolcoath, 19s.       | 30 W. Tankerville, 41s. 9d.  |
| 60 Cleve Hill Col., 15s. 6d. | 45 New Quebrada.             | 60 Welsh Freehold, £5½.      |
| 70 Don Pedro.                | 85 New Rosario.              | 70 West Mostyn, 43s. 9d.     |
| 3 Dolcoath, £34.             | 15 New Sharlston.            | 60 West Caradon, 1s. 6d.     |
| 35 East Caradon, 18s.        | 50 Old Batholles, 8s. 6d.    | 10 West Chiverton, £5½.      |
| 40 East Grenville, 10s. 6d.  | 50 Old Treburgett, 21s.      | 25 West Maria.               |
| 10 East Lovell, £10½.        | 70 ditto Freehold, 18s.      | 25 Wedgwood Coal.            |
| 15 East Van, 28s. 9d.        | 70 Perkins Beach.            | 25 W. Esqair Lie, £2½.       |
| 35 Eberhardt, £3½.           | 40 Pennerley, 38s.           | 10 West Basset.              |
| 30 Emma, 57s.                | 100 Penrithal, 16s. 6d.      | 35 Wheal Crebor, £3½.        |
| 100 Exchequer, 14s. 6d.      | 75 Port Phillip.             | 10 Wh. Grenville.            |
| 70 Frontino.                 | 100 Prince of Wales, 5s. 9d. | 30 W. Wh. Gorland, £1½.      |
| 58 Flagstaff, £2 18s. 9d.    | 80 Rica, 11s.                | 50 Wh. Mary, 41s.            |
| 100 Fortescue, 5s.           | 45 Rosewall Hill, 13s.       | 70 York Peninsula, 6s.       |
| 100 Great West Van, 35s. 9   | 30 Rookhope, 19s.            |                              |
| 20 Great Vor, 22s. 6d.       | 25 Richmond, £5½.            |                              |
|                              | 60 S. Roman Grav., 17s. 6    |                              |

Bankers: London and Westminster.

CHAPPEL HOUSE COLLIERY.—Output of coal, 14,000 tons. A few shares to be disposed of at par, £3 paid, on which will be declared in a few days a dividend of 15 per cent., carrying forward a good surplus.

### MR. CHARLES THOMAS,

MINING AGENT, 3, GREAT ST. HELEN'S, LONDON, E.C.

### MESSRS. A. W. THOMAS AND CO.,

MINING AGENTS, AND STOCK AND SHARE DEALERS.

### GEORGE LAVINGTON, STOCK AND SHARE BROKER,

ST. MICHAEL'S CHAMBERS, 42, CORNHILL, LONDON, E.C.

### MESSRS. PENNINGTON AND CO., 3, ROYAL EXCHANGE BUILDINGS, E.C., STOCK AND SHARE DEALERS, have BUSINESS in the undermentioned:—

|                    |                     |                  |
|--------------------|---------------------|------------------|
| Birdseye.          | Tecoma.             | Sweetland Creek. |
| Emma.              | West Wheal Gorland. | Malpas.          |
| Flagstaff.         | Gold Run.           | Buller.          |
| Kitty (St. Agnes). | Pacific.            | Rica.            |
| Cedar Creek.       | Malabar.            | West Esqair Lie. |

Parties wishing to purchase or sell in the foregoing are requested to make application. PENNINGTON AND CO., SWORN BROKERS.

### TO INVESTORS.

### MESSRS. PENNINGTON AND CO.'S "MONTHLY RECORD OF INVESTMENTS," published on the first Thursday in each month,

contains an exhaustive Review of the British and Foreign Stock and Share and Money Markets, &c., with an enumeration of safe investments, paying from 10 to 20 per cent. Price 6d. per copy, or 5s. annually.

PENNINGTON AND CO., 3, Royal Exchange-buildings, E.C.

### JOHN B. REYNOLDS, STOCK AND SHARE DEALER,

70, BISHOPSGATE STREET WITHIN, LONDON, E.C.

Has LARGE LOTS OF MINING SECURITIES FOR SALE. Full particulars on application. The present is a better time for buying mines than we have had for many years past, particularly as so many of the uninitiated are eager sellers.

### MR. JAMES HUME, STOCK AND SHARE BROKER,

1, ST. SWITHIN'S LANE, LOMBARD STREET, LONDON.

Every kind of shares bought or sold, net or on commission. Shares not generally negotiable exchanged.

Bankers: The London Joint-Stock.

### MESSRS. J. TAYLOR AND CO., OF 86, LONDON WALL, E.C.

(late of 3, Union-court, Old Broad-street); and MINING EXCHANGE, SOUTH KING STREET, MANCHESTER.

Business done in all kinds of Stocks and Shares



# THE KEHELLAND CONSOLS COPPER MINING COMPANY (LIMITED).

Capital £24,000, in 12,000 Shares of £2 each.  
First issue of 3000 Shares.

## DIRECTORS.

JOHN RULE DANIELL, Esq., Camborne, Cornwall.  
T. S. G. KIRKPATRICK, Esq., Oxford and Cambridge Club, Pall Mall; and 38, Eccleston-square, S.W.  
THOS. H. POTTER, Esq., High Beech, Essex.  
ARTHUR UPTON CHALLINOR, Esq., Hanley, Stoke-upon-Trent.

## BANKERS.

Messrs. TWEEDY, WILLIAMS, and CO., Redruth, Cornwall;  
and their London Agents,  
Messrs. GLYN, MILLS, and CO., Lombard-street.

## SOLICITORS.

ROBERT WOOD LOCKWOOD, Esq., 20, Park row, Leeds.  
LONDON AGENTS:—Messrs. NORRIS, ALLENS, and CARTER,  
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RESIDENT MANAGER—Mr. W. R. RUTTER.

## BROKERS.

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SECRETARY—Mr. CHARLES S. DAVIES.

## OFFICES (pro tem).

5, SOUTHAMPTON BUILDINGS, CHANCERY LANE, W.C.

## ABRIDGED PROSPECTUS.

The Kehelland Consols Copper Mining Company (Limited) has been formed for the purpose of acquiring and developing a piece of almost virgin ground, in close proximity to the celebrated Wheal Seton, West Seton, and Dolcoath Mines.

The following list of mines in the immediate neighbourhood of Kehelland Consols, showing the amount paid in dividends as compared with the outlay, will furnish some idea of the marvellous richness of the district:—

| Name of mine.     | On an outlay of | Have paid dividends amounting to |
|-------------------|-----------------|----------------------------------|
| Carn Brea         | £35,000         | £289,000                         |
| Dolcoath          | 46,146          | 477,000                          |
| East Wheal Crofty | 11,750          | 17,960                           |
| East Pool         | 3,104           | 56,000                           |
| North Roskear     | 8,400           | 102,000                          |
| Tincroft          | 54,000          | 220,800                          |
| West Seton        | 18,000          | 235,000                          |
| South Roskear     | 7,000           | 216,000                          |

The Kehelland Consols sett lies immediately north-west of West Seton and Wheal Seton Mines, and contains several lodes parallel to and identical with those which in the above-mentioned mines have produced such enormous returns.

One of the most important features with respect to this mine, and one which may certainly be considered decisive with regard to the undoubted richness and productiveness of its lodes, is the fact that there is an elvan course in close proximity to the north lode, which will intersect it at about 30 fms. below surface, where large deposits of ore may be confidently expected, for it is a well known and distinctive feature of Cornish mines that the largest bodies of ore always make at the junction of a lode with an elvan course.

Full prospectuses and the reports of the following agents, viz., Captains J. ISAAC THOMAS (Dolcoath), WILLIAM GARRY (East Pool), WM. ROWE (West Frances), JAMES POPE (for 20 years manager of Wheal Basset), JOSEPH MICHELL (West Jewell), and others, together with any other information, to be had on application to Messrs. CHAMBERS and Co., 5, Southampton-buildings, Chancery-lane, London, W.C.

# THE KEHELLAND CONSOLS COPPER MINING COMPANY (LIMITED).

Notice is hereby given, that the SHARE LIST in the above Company will CLOSE on WEDNESDAY, March 4, 1874, for LONDON, and on FRIDAY, March 6, 1874, for the COUNTRY. By order, CHAMBERS and CO., 5, Southampton-buildings, Chancery-lane, London, W.C., Feb. 25, 1874.

# RAILWAY CARRIAGE COMPANY (LIMITED).

ESTABLISHED 1847.

OLDBURY WORKS, NEAR BIRMINGHAM.

MANUFACTURERS OF RAILWAY CARRIAGES AND WAGONS, and EVERY DESCRIPTION OF IRONWORK.

Passenger carriages and wagons built, either for cash or for payment, over a period of years.

RAILWAY WAGONS FOR HIRE.

CHIEF OFFICES,—OLDBURY WORKS, NEAR BIRMINGHAM.  
LONDON OFFICES,—7, GREAT WINCHESTER STREET BUILDINGS.

# THE BIRMINGHAM WAGON COMPANY (LIMITED).

MANUFACTURE RAILWAY WAGONS OF EVERY DESCRIPTION, for HIRE and SALE, by immediate or deferred payments. They have also wagons for hire capable of carrying 6, 8, and 10 tons, part of which are constructed specially for shipping purposes. Wagons in working order maintained by contract.

EDMUND FOWLER, Sec.  
WAGON WORKS,—SMETHWICK, BIRMINGHAM.

\*. Loans received on Debenture; particulars on application.

# GREENE AND ELLIS' IMPROVED FETTLING FOR PUDDLING FURNACES.

is now in active operation at the SKERNE IRONWORKS, DARLINGTON, and LICENSES may be had for USING the PATENT on application to T. GREENE, STATION STREET, DARLINGTON. The improved yield and quality of iron produced, and the economy effected by the process, render its speedy universal adoption, in these times, a matter of necessity and certainty.—Darlington, January, 1874.

# CAPTAIN ABRAHAM FRANCIS,

GOGHIN, ABERYSTWYTH.

MINING AGENT, ENGINEER, AND SURVEYOR.

The great success which is attending the opening and working of the Mines in the counties of Cardigan and Montgomery, and the many properties placed at the disposal of Capt. ABRAHAM FRANCIS, induce him to offer his services either to ADVISE, INSPECT, REPORT, or SURVEY, for Mining Companies or private shareholders.

For terms, apply to Capt. ABRAHAM FRANCIS, as above.

# MR. CHARLES F. COLLOM,

MINING ENGINEER, INSPECTOR OF MINES, &c.

TAVISTOCK.

MANAGEMENT OF THE STOUT DEVON FIRE-CLAY COMPANY.

Patentee of COLLOM'S PATENT REVOLVING FRAME for DRESSING TIN, AMALGAMATING GOLD, &c.  
INVESTMENTS IN MINES ARRANGED FOR CAPITALISTS.

# MESSRS. GROSVENOR AND CO., SHAREBROKERS,

88, PORTLAND STREET, MANCHESTER, beg to inform their clients and the public in general that they have for sale a few shares in each of several most promising Progressive Mines, which they fearlessly assert will shortly return to investors enormous profits on a small outlay and at a nominal risk.

# MESSRS. WATSON BROTHERS return their most sincere

thanks for the great patronage bestowed and confidence reposed in their firm for upwards of 30 years, and to assure their friends and clients it will be their earnest endeavour to merit a continuance of both.

In the year 1843, when Cornish mining was almost unknown to the general public, attention was first called to its advantages, when properly conducted, in the "Compendium of British Mining," commenced in 1837, and published in 1843, by Mr. J. Y. WATSON, F.G.S., author of "Gleanings among Mines and Miners," "Records of Ancient Mining," "Cornish Notes" (first series, 1862), "Cornish Notes" (second series, 1863), "The Progress of Mining," with Statistics of the Mining Industry, annually for 21 years, &c., &c. In the Compendium, published in 1843, Mr. WATSON was the first to recommend the system of a "division of small risks in several mines, ensuring the success in the aggregate," and Messrs. WATSON BROTHERS have always a selected list on hand. Perhaps at no former period in the annals of mining has there been more peculiar need of honest and experienced advice in regard to mines and shareholding than there is at present; and, from the lengthened experience of Messrs. WATSON BROTHERS, they are emboldened to offer, thus publicly, their best services to all connected with the mining interest.

Messrs. WATSON BROTHERS are daily asked their opinion of particular mines, as well as to recommend mines to invest or speculate in, and they give their advice and recommend mines to the best of their judgment and ability, founded on the best practical advice they can obtain from the mining districts, but they will not be held responsible, nor subject to blame, if results do not always equal the expectations they may have held out in a property so fluctuating as mining.

## COLLIERIES, IRONWORKS, &c.

Among the great complaints of metallic miners of late, has been the high prices of Coal and Iron; thus while dividends in Copper and Tin Mines have been gradually declining, many Collieries and Ironworks have been paying 20, 30, and even 60 per cent.; and in consequence of this, Messrs. WATSON BROTHERS have had several enquiries from clients for prices and particulars of the best investments in both classes, and they are collecting information which they hope to publish from time to time, and will be glad if Secretaries and Managers will furnish them with the same kind of information that Purveyors and Secretaries of Metallic Mines have so freely done during the last 30 years. In the meantime they will be ready to deal, at Market prices, in any or all of them.

# MESSRS. R. SYMONS AND CO.,

LAND SURVEYOR AND MINING ENGINEER.

11, PARADE, TRURO.

Plans of every description prepared from actual survey, or from drafts furnished. Plans, sections, prospectuses, &c., lithographed in any quantity.

The condition of any mine truly described upon request.—Truro, Jan. 14, 1874.

# MESSRS. R. SYMONS AND CO., C. AND M.E.

Have FOR SALE COPPER, IRON, and TIN MINES OF GREAT PROMISE.

Leases in possession.

## THE LISTS OF SUBSCRIPTION

will be OPENED on FRIDAY, the 27th February, AND BE CLOSED ON OR BEFORE

WEDNESDAY, the 4th March, at Four o'clock for LONDON, and THURSDAY, 5th March, at Twelve o'clock for COUNTRY APPLICATIONS.

## SPECIALLY SECURED BONDS.

ISSUE OF £480,000 STERLING WESTERN EXTENSION TRUST BONDS

of the ATLANTIC AND GREAT WESTERN RAILROAD COMPANY, With Guarantee of Interest by the ERIE RAILWAY COMPANY, And further secured by Deposit of Shares of the CLEVELAND, COLUMBUS, CINCINNATI, and INDIANAPOLIS RAILROAD COMPANY.

In the names of the undermentioned Trustees:—

Sir JOHN SWINBURNE, Bart., Capheaton, Newcastle-on-Tyne.  
Sir GEORGE BALFOUR, K.C.B., M.P., 6, Cleveland Gardens, London.  
H. WOLLASTON BLAKE, Esq., M.A., F.R.S., 8, Devonshire-place, London.

In Bonds of £100 each, bearing Seven per Cent. Interest, payable in Gold, Half-yearly, in London, at the Offices of the Company, on 1st May and 1st November in each year. Interest accrues from 1st February last, the first Coupon being payable 1st May next.

The Bonds are redeemable at £100 sterling on 1st February, 1904.

PRICE OF ISSUE £85 PER £100 BOND.

The yield to subscribers on the price of subscription is over 8 per cent. per annum, in addition to £15 profit per bond on redemption, payable as follows:—

|   |  |
|---|--|
| £5 per bond applied for payable on application. |  |
| 20 " " " " on allotment.                        |  |
| 20 " " " " on 1st May, 1874.                    |  |
| 20 " " " " (less Coupon due on this day).       |  |
| 20 " " " " on 1st June, 1874.                   |  |
| 20 " " " " on 1st July, 1874.                   |  |

The ATLANTIC AND GREAT WESTERN RAILROAD COMPANY has authorised the issue of the above-mentioned bonds, the proceeds of which will be applied in acquiring the further number of 24,000 shares, of £100 each, of the Cleveland, Columbus, Cincinnati, and Indianapolis Railway Company, in addition to those provided for by the Western Extension Certificates, issued in July, 1873.

These bonds are entirely of an exceptional character, being specially secured in the following manner, viz., by:—

- 1.—The Atlantic and Great Western Railroad Company, who issue the bonds.
- 2.—The Erie Railway Company, who absolutely guarantee the interest on such bonds during the entire currency of the same, by endorsement on each bond.
- 3.—The Cleveland, Columbus, Cincinnati, and Indianapolis Railroad shares, which are to be deposited with trustees as a guarantee for both principal and interest.

Thus forming a threefold security of great strength. Of the position and prospects of the three lines, information has been so fully given from time to time by the companies, that extended details are not here required.

The Atlantic and Great Western Railroad Company, by its control of the Cleveland, Columbus, Cincinnati, and Indianapolis Railroad, will command new sources of traffic and connection with the chief western cities of vast importance to the Atlantic and Great Western and Erie Railway systems.

The Erie Railway Company's official report shows, after payment of interest and expenses, that there remained a clear net income for the financial year ending 30th September, 1873, equal to £387,555 sterling, available for distribution as dividends to the shareholders, as will be seen by the extracts from the accounts of the company for the year 1873 furnished below, and a still larger net income is expected for the year 1874, even after making allowance for interest on any increased capital the company may issue.

The guarantee of interest on the bonds now offered for subscription, in the improbable event of its being required to be acted upon, would have to be provided for by the Erie Company; and, as the total amount of interest required on these bonds only amounts to £53,600, it will be seen that an enormous margin of security exists for the subscribers to the present issue.

In addition to the guarantees before enumerated, 24,000 shares of £100 each of the Cleveland, Columbus, Cincinnati, and Indianapolis Railroad Company will be deposited in the names of trustees, as a special security for the due and punctual payment of the principal and interest of the bonds now for subscription, and the annual income from these shares (irrespective altogether of the Atlantic and Great Western Railroad Company and the Erie Railway Company's guarantees) will be available to meet the interest payable on the bonds now for subscription.

The Cleveland, Columbus, Cincinnati, and Indianapolis Railroad Company has been in operation upwards of 22 years, and has always earned and paid large dividends, the line being in a highly prosperous condition, as will be seen by the following table of dividends on its shares paid during the last seven years:—

| Year                                       | 1867 | 1868 | 1869 | 1870 | 1871 | 1872 |
|--|------|------|------|------|------|------|
| Cash Dividends paid 9 per Cent. per Annum. | 8    | 7    | 7    | 7    | 7    | 7    |

It will be evident, therefore, that the security of the bonds now for subscription is of the very highest character.

With a view to vesting in the trustees the above-mentioned shares of the Cleveland, Columbus, Cincinnati, and Indianapolis Railroad, to be deposited as security for the bonds now to be issued, a deed of trust has been prepared, and the shares will be deposited in the Bank of England in the names of the undermentioned trustees:—Sir John Swinburne, Bart., Capheaton, Newcastle-on-Tyne; Sir George Balfour, K.C.B., M.P., 6, Cleveland Gardens, London; H. Wollaston Blake, Esq., M.A., F.R.S., 8, Devonshire-place, London; who will collect the dividends on the shares, and apply the same, as required, for the payment of the interest on the bonds. By the map which accompanies the prospectus it will be seen that, by means of the Cleveland, Columbus, Cincinnati, and Indianapolis Railroad, direct communication will be established between the Great Western States and the Erie Railway via the Atlantic and Great Western Railroad, to the great advantage of the three great undertakings.

The length of the lines worked by the several companies is as follows, viz.:—  
Atlantic and Great Western Railroad..... 609 miles.  
Erie Railway..... 1032 " "  
Cleveland, Columbus, Cincinnati, and Indianapolis Railroad, and connections..... 1139 " "  
Total miles..... 2780

# MESSRS. GRANT BROTHERS and CO., are authorised to offer

for public subscription the above-described 4800 sterling bonds. The interest on the bonds for subscription is payable in Gold in London at the offices of the Atlantic and Great Western Railroad Company, by coupons attached. Interest accrues on the bonds from 1st February last, and the first coupons for interest up to 1st May next (three months) will be payable on 1st May next, and subsequently half-yearly, on 1st November and 1st May in each year.

The Atlantic and Great Western Railroad Company reserves the right of redeeming the Bonds at par (100s. per bond), being 15% bonus on the price of subscription, at any time, on giving six months' previous notice by public advertisement.

Allotments will be preferentially offered to holders of the securities of the Erie and Atlantic and Great Western Companies.

Subscribers and allottees will have the option of paying all instalments under discount at the rate of 5 per cent. per annum on allotment. The failure duly to pay any instalment will subject all previous payments to forfeiture, and cancel the allotment.

Scrap certificates will be issued against allotment letters and the bankers receipts, and, after payment of the final instalment, will be exchanged for definite bonds as soon as practicable.

In case the allotment is made the deposit will be returned without deduction, and in case the allotment should not require the whole deposit, the surplus will be applied towards the amount payable on allotment.

Applications must be made in the form herewith, and be accompanied by a deposit of £5 per bond applied for, and must be forwarded to Messrs. Grant Brothers and Co., Bankers, 24, Lombard-street, E.C., London.

Forms of application may be obtained at the banking house of Messrs. Grant Brothers and Co., 24, Lombard-street, E.C., London, and of all London stockbrokers. 24, Lombard-street, E.C., London, Feb. 26, 1874.

## ERIE RAILWAY.

Statement of revenue for the year ending 30th September, 1873, as per statement furnished by the company:—

|  |                     |
|--|---------------------|
| The Gross Earnings of the year ending 30th September, 1873, were.....              | £4,002,521          |
| The Working Expenses proper of the year, including repairs and renewals, were..... | £2,728,128          |
| The exceptional Expenditure for Rents of Leased Lines and Car Companies, &c.....   | 280,340             |
| Interest on the Bonded Debt.....   | 606,388 = 3,614,856 |

Leaving a surplus earnings for the year of..... £387,635  
The estimated net revenue for the year 1874, after making provision for the working expenses, rent of leased lines, &c., and for interest on an increase of the bonded debt is £492,872.

The total interest required for the bonds now offered for subscription is only £53,600 per annum.

## SPECIALLY SECURED BONDS.

ISSUE OF £480,000 STERLING WESTERN EXTENSION TRUST BONDS

of the ATLANTIC AND GREAT WESTERN RAILROAD COMPANY, With Guarantee of Interest by the Erie Railway Company, And further secured by Deposit of Shares of the Cleveland, Columbus, Cincinnati, and Indianapolis Railroad Company.

## FORM OF APPLICATION.

No. .... To Messrs. GRANT BROTHERS and Co., 24, Lombard-street, E.C., London.

I request that you will allot to me ..... Western Extension Trust Bonds of the

Atlantic and Great Western Railroad Company, on which I enclose £..... being the required deposit of £5 per bond, and I agree to accept the said bonds, or any less number you may allot to me, and to make the remaining payments thereon in accordance with the prospectus dated February 26, 1874.

Name (in full) .....  
Address .....  
Description .....  
Date ..... 1874 Signature .....

NO APPLICATION FOR SHARES CAN BE RECEIVED AFTER TUESDAY, MARCH 3, FROM LONDON, AND THE FOLLOWING DAY FROM THE COUNTRY.

# THE NEW SOUTH WALES COLLIERIES COMPANY (LIMITED).

Capital £200,000, in 10,000 shares of £20 each.

(2500 Shares to be applied in part purchase of the Coal Fields.)  
Issue of 7500 shares of the capital of £150,000 now offered for subscription, £100,000 has been guaranteed.

Payments—£1 on application; £2 on allotment. No call to exceed £4 per share, and to be made at intervals of at least one month. If no allotment is made the deposits will be returned in full.

## DIRECTORS.

H. CECIL RAIKES, Esq., M.P., 95, Onslow-square—CHAIRMAN.  
Sir CHARLES COWPER, K.C.M.G., Agent-General of New South Wales.

Vice-Admiral Sir WILLIAM H. HALL, K.C.B., Director Peninsular and Oriental Steam Navigation Company.

CARLETON L'ESTRANGE, Esq., Director Peninsular and Oriental Steam Navigation Company.

WALTER LORD, Esq., 27, Leadenhall-street.

Major C. F. ROBERTS, R.A., Secretary to Agent-General of New South Wales.

L. SEDGWICK, Esq., Dent, West Riding, Yorkshire.

## EXECUTIVE COMMITTEE IN SYDNEY.

The Honourable FRANCIS LORD, Member of the Legislative Council of New South Wales.

Major C. F. ROBERTS, R.A., Secretary to Agent-General of New South Wales.

JOHN LAMB, Esq., Director of the Standard Life Assurance Company, Sydney.

## BANKERS IN LONDON.

Messrs. BROWN, JANSON, and CO., Abchurch-lane, Lombard-street, E.C.

Messrs. W. WILLIAMS, BROWN, and CO., Leeds.

## BANKERS IN NEW SOUTH WALES.

## BANK OF AUSTRALASIA.

## BROKERS.

Messrs. LINDOW, KING, and CO., 10, Warrford-court, E.C.

## SOLICITORS.

Messrs. WILD, BARBER, and BROWNE, 10½, Ironmonger-lane.

## TEMPORARY OFFICE.

8, UNION COURT, OLD BROAD STREET, E.C.  
SECRETARY (pro tem.)—Mr. G. H. NEWMAN.

## ABRIDGED PROSPECTUS.

This company is formed for the purpose of acquiring and working extensive and valuable coal fields, situate within a mile of an excellent shipping port, and distant only 16 miles from Newcastle, and 48 miles from Sydney in New South Wales. Mr. John Mackenzie, F.G.S., the Government Examiner of Coal Fields in New South Wales, estimates the quantity of coal and slack which can be got from these coal fields at upwards of 60,000,000 tons, and it will be seen from his report (vide Appendix A) that the lowest seam on the property has a thickness of about 5 ft. of good workable coal, and is the celebrated Wallsend Seam, which is now being worked by the following companies, viz.: the Wallsend Company, Waratah Company, Lambton Company, New Lambton Company, Australian Agricultural Company, and Co-operative Company; and is considered the best coal discovered in Australia. He states that these coal fields embrace an area of upwards of 2900 acres, that the upper seams of coal crop out at the surface, and may be reached without sinking any shaft or the employment of expensive machinery. Lieut. GOWLAND, R.N., Admiralty Surveyor, who is now in this country, estimates that coal from the property can be raised and shipped within about three months from commencing operations from No. 2 seam.

The Sydney Morning Herald of 4th September last contains a letter showing that "50,000 tons of shipping were then waiting in Newcastle for their turn to get loaded with coals;" and at a later date the same journal reports that "the output of all the mines is still insufficient to meet the export demand;" and the issue of the 3rd November, 1873, contains the following statement:—"Mining coal: No description of mining shares are so valuable as these, and the companies now working are making large profits. The Waratah Company has returned £2 per share of capital during the present year, and paid a dividend of 10s. per share for the past half year." (The shares of this company are £5 fully paid-up.)

A section of coal 12 ft. thick, cut out of No. 5 seam, was exhibited in the South Kensington Exhibition, and may now be seen, by permission of the Agent-General of the Colony, at his offices, No. 3, Westminster Chambers.

The directors have secured the services of an able manager, who has been many years resident in the colony, and is personally acquainted with the property, and who will proceed forthwith to take charge of the company's affairs.

The only collieries at present in regular work in the colonies from which the requirements of Australia, California, China, India, Japan, Java, New Zealand, Singapore, and the principal ports in the Pacific and the East can be adequately supplied are those of New South Wales. The collieries at present at work are unable to supply this demand, although the exports last year amounted to over 1,000,000 tons.

The large fleets of Intercolonial steamers running between the various ports of Australia and New Zealand use no other coal, and the Peninsular and Oriental Steam Navigation Company obtain all their coal from this source. In addition to these there are two other lines of steamers, the one between California and Australia, and the other between Singapore and Australia, already under contract with the Australian Government, both of which must be in a great measure dependent upon New South Wales for their coal, and the large steamers of the line between Australia and Batavia will also mainly have to look for their eastern supply to this source.

It is known that vessels requiring coal often lie for weeks in the harbour of Newcastle waiting to be supplied, and are then obliged to leave in ballast, being unable to obtain their cargoes. The opening of new collieries is, therefore, urgently required to meet even the present demand.

There are three workable seams of coal upon the land acquired by the company. The upper seam, which is about 4 ft. 6 in. in thickness, is a splint coal, well adapted for steam and smelting purposes, and lies above the sea level, and is workable (without shafts) by adits. The next seam, which is about 14 ft. thick, is a bituminous and splint coal, suitable for steam, smelting, gas, and domestic purposes; this is partly above the sea level. The lowest seam, which is estimated to average from 9 to 12 feet thick, is the celebrated Wallsend seam, and is a bituminous coal, suitable for steam, smelting, and eminently for gas and household purposes. This seam is very profitably worked at Newcastle, N.S.W., at a depth of about 140 yards. The southern outcrop of the seam (No. 5) is within a quarter of a mile south of the company's boundary, where it is now being worked on the surface, and it is calculated that it will be worked at a depth of 75 feet below the surface on the company's property.

The coal can be shipped at a natural harbour near the northern end of the property (having an area of about 45 acres), formed by Moon Islet and adjacent reefs, but a railway or tramway of about 1½ mile in length, from the adits to the shipping place, will have to be constructed, and this will pass for part of its course over Crown lands, upon which the company have obtained the right to construct their railway and other works.

At the sea harbour terminus of the tramway a jetty must be constructed for the use of vessels loading with coal; a



## THE THIRTEEN-MONTHS PAY SYSTEM.

Many letters have been and are being sent to this Journal against the continuance of this system. There is no doubt the objections raised against it are valid, and are giving rise to increasing dissatisfaction, and it would be wise that the 13 annual pay system should be abandoned forthwith, otherwise it may give a serious check to mining investments. The termination of mining pay accounts every four weeks brings them, unfortunately, at different dates each succeeding month, which is very awkward, and makes the accounts perplexing to shareholders, so that in practice this system is abortive in giving them a clear and definite representation of mine accounts, from the want of a fixed calendar monthly termination.

There are two ways this may be obviated.—1. Fixing upon one uniform Saturday each month, as formerly, for the pay; or, 2. the last day of each month, whatever day of the week that happens to fall. The former, doubtless, is preferable, as it always completes the week, and secures the same day for the pay, but, of course, it involves one five-weeks pay every quarter, still it brings up the accounts to one definite period of the month, which is unquestionably the right principle to adopt, and has, until the present innovation always worked well since mining began in Cornwall. The latter plan would do equally well were it not that the last days of each month fall on different days during the year, which would make an average monthly pay of 30½ days, but by the pay would be brought up to a clear termination of calendar months. The inconvenience this plan apparently would occasion would be with the agents, in the setting days not being uniformly the same day of the week.

The feeling is gaining ground that the original system should be returned to, and the arguments adduced in its favour are so strong that agents and miners for their own interests should show no reluctance to yield, but be ready to fall in with it for the satisfaction of those who have embarked capital in mining enterprises, especially when a liberal compromise has been proposed in computing the existing 13 pays into 12; and if they hesitate they may lose an advantage they have gained. For the information of interested parties who have not seen the report for the adoption of this course, the following has been extracted from it, referring especially to the subject which has given rise to so much just correspondence.—The committee regret to find the present mode of four-weeks payments is a source of very great inconvenience, inasmuch as it creates 13 pays in the year, and causes the month's pay days to fall at irregular dates of the month, and more especially it deranges the piles of ore for the sales which take place at the usual periodical dates, and which have not been adapted to the altered circumstances of the new system of pay. There are, also, minor inconveniences attending it in not having the proper system of fixed monthly dates. In consequence of these drawbacks the committee have proposed to the men at the mine to revert to the old method of a fixed Saturday of the month for the pay, and 12 pays a year, in order that each month's cost may show distinctly against each month's returns, the one sales being bi-monthly, making six in the year. In the re-adoption of the original system of calendar monthly payments, the committee resolved that the men should in no way be losers by this change, as the 12 pays should be made equal to their present 13. The men have raised an objection on the grounds that other mines of the district have not yet reverted to the old system, but would fall in with it if generally adopted. The committee hope that this will shortly be effected, which is being resorted to in some instances in Cornwall, in consequence of the great inconvenience occasioned by the 13 pays in the year. Had this been foreseen, there is no doubt that consent would not have been given for its adoption.

There is not much reason in this statement for the relinquishment of an objectionable system of pay, but the consideration given for returning to the old, legitimate principle of pay is so conclusive that it should be acquiesced in by agents and miners if they wished to give general satisfaction; it has now been done in some few instances, and it is important for all interests that shareholders should not be irritated by a pay system in which they have no confidence. As it has proved to be obnoxious, and becoming more so, some of the leading mining companies should resolve to give instructions to have the settings of bargains made as formerly, and in reverting to the old principle it would speedily settle a vexed question.

## ECHOES FROM THE MINING MARKET.

As might naturally be expected, one of the many important topics now occupying the attention of the mining market is the probable future of the home tin trade. It cannot be denied that the prospects of this particular branch of the mining industry are very gloomy, so gloomy, indeed, that even its most sanguine supporters are well nigh driven to despair. Only last week the probable stoppage of Botallack was openly canvassed, and whilst we write rumours are rife of the imminent abandonment of one or two mines whose names are "familiar as household words." Certainly that day sees old Botallack "knocked" will not be a very cheering one for Cornwall, but that is not the worst, and that this wonderful example of human skill and industry will, with a better tin market, again pay profits to its shareholders, and continue for many years to come to yield employment to the district, and a "fearful joy" to adventurous tourists.

The burden of blame for the present state of affairs in the tin trade is by all laid upon that most enterprising of our colonies—Australia. She is accused of flooding the market, and underselling the home country. If the Australians can produce tin at a cost that will pay them to send it here no one can blame them for so doing, but it is, nevertheless, doubted by many whether their work can pay at the present price of the metal here. On the other hand, it is very certain that the immense majority, if not all, of the Cornish mines *cannot*, and the manager of the two solitary ones which paid dividends during last month—Carn Breva and Tincroft—must by this time be pretty nearly at his wit's end to make both ends meet. Every ton of tin ore raised at Dolcoath must cost over 60s., whilst the market value is below this price, and is still declining. A great deal has been said about the Australian tin streams being very likely to turn out profitable works, even in the present low state of the trade, for "streaming" is not a title of the cost of mining. Yet even if their profitable character were established, the question of their ultimate effect upon Cornish mining is not satisfactorily settled, although one or two do say "If the Australians pay, you may as well shut up every mine in Cornwall at once." This is undoubtedly an extreme view. Until, however, we have some reliable statistics from the colony as to the cost of the late importations any statements as to their unremunerative character can be little less than conjecture, and should be received with the greatest caution. Meanwhile we may console ourselves with noticing that both coal and iron—the excessive cost of which has greatly helped to bring about the present depressed state of affairs in Cornwall—have receded in price, and bid fair to recede much further.

From Cornwall we hear that the new system of pay has given general dissatisfaction, and many mines are stated to be returning to the old plan of 12 pays in the year. There is no doubt that some amount of confusion has been caused by the new system, and that it tends neither to increase the lucidity of mine accounts (never startlingly plain at any time to out-advancers), nor to confer any special benefit upon the working miner. It appears likely that for the next two or three months the question will attract considerable attention, and, doubtless, the *pros* and *cons* will be hotly debated by the respective partisans.

Some remarks made at the late meeting at North Roskear respecting a "combination" amongst the Cornish smelters to raise the price of tin have excited considerable attention. Whilst every well-wisher to Cornish mining fervently hopes that the smelter's efforts may be crowned with success, many, in the face of the excessive imports, doubt their ability to control the market as of old, and fear that they may find it necessary again to "follow where they cannot lead."

It is said that there is some chance of the result of the East Pool and Wheal Agar arbitration being announced in a few days. It may be remembered that the latter mine will drain the former, and the management think it only an act of justice that the East Pool should contribute to the heavy pumping charges. Wheal Agar burns some 150 tons of coal per month, at a cost of (say) 20s. per ton (150s.), and the management suggest that their neighbours should contribute at least one-half of this cost. Of course, until the award is made it would not be fair to comment upon the case or to reflect upon the arguments of the market.

For-sign mines have been wonderfully quiet lately. The golden days of premiums have fled, apparently never to return, and shareholders, as a body, are naturally in rather a despondent condition. Auent the Emma Mine, it is a singular fact that the shares actually rose upon the publication of the official report announcing the poverty of the lode in the bottom of the mine and the general gloomy state of affairs. It may be as well to state, however, that the truth of this report is openly called in question, and private advices from the mine just to hand state that the lode where the discovery was announced a short time since has been driven upon for 100 ft., has greatly improved, and the width has increased from 13 ft. to 17 ft. The attention of shareholders in the various foreign mines lately so prominently before the market seems principally directed towards setting their affairs in order, and investigating *ab initio* the accounts. As a commencement, the Flagstaff has turned out the whole board of direction, and have elected a new one.

JAMES H. CROFTS.

## TIN TRADE—CORNISH MINING.

"A Cornishman" writes to say that—"Tin Mining Share Markets have utterly collapsed, 9-10ths of Cornish tin mines are absolutely at present of no value to work, owing to the low prices obtainable for tin ore and tin metal. Great distress must soon exist among the mining population of Cornwall, unless the panic be speedily removed. I was induced, a few days since, to make some enquiries into the cause of this depression in the price of tin, and the impending calamity to Cornwall. The result is as follows:—In 1872, tin metal fetched 163s. per ton, now 106s. per ton. Then, by interested persons, a famine in tin was predicted. Henceforth this price is promulgated by the same interested parties. The following statistics, the correctness of which may be relied on, will prove that the tin bugbear stocks of tin do not warrant the present low and much depressed price of tin. One word of caution about the present low and much depressed price of tin. I saw in this month's Metal Circular a statement that 1500 tons of Australian tin metal was afloat; there are not 50 tons afloat, as a reference to Australian published exports will prove. Yet this reported 1500 tons has gone to swell up the great stock of metal. Of course it was written for interested purposes. Stock of foreign tin in London from January to December, 1873 and 1872:—

|           | 1873. | 1872. |
|-----------|-------|-------|
| January   | 956   | 1406  |
| February  | 789   | 1515  |
| March     | 779   | 2056  |
| April     | 704   | 2220  |
| May       | 1288  | 1800  |
| June      | 1960  | 1860  |
| July      | 2103  | 1725  |
| August    | 1966  | 1982  |
| September | 1864  | 1759  |
| October   | 1877  | 1829  |
| November  | 1794  | 1287  |
| December  |       | 1226  |

The American severe panic of last year, and the importations of Australian tin, have had some effect in lowering the price of tin. Happily, the first has passed away, and as is the second Australian tin is not so much in demand in consequence of the low price of tin in the market. Hundreds of miners in Australia have left tin mining for

gold mining. The cause of depression is not due to excessive stocks (the contrary is the fact, as shown by the quantities mentioned above), but is due to the late depression of the tin market, and the consequent fall in the price of tin. It is a fact that the total imports of foreign tin into London during 1873 were 3105 tons less than in 1872. No imports since December have disturbed this relation. The question is, how can the damaging influence at work to mining industry in Cornwall be checked?"

## THE EXHIBITION OF APPLIANCES FOR THE ECONOMICAL CONSUMPTION OF COAL.

A special meeting of the members of the Manchester Scientific and Mechanical Society was held on Tuesday for the purpose of discussing the merits of the various apparatus shown at the Manchester Exhibition of Appliances for the Economical Consumption of Coal, to which a visit had been paid. Mr. J. SHEPHERD occupied the chair.

Mr. J. WORMALD introduced the discussion by giving a brief outline of the principal exhibits. He thought they would all agree that for the purposes of the exhibition such a collection had never before been brought together. Although, comparatively speaking, there were but very few things in the exhibition, there was in it all that was practically of use in the fuel question. He could notice, first, the mechanical stokers. The most noticeable was Dillwyn Smith's. There was not the least doubt it was a very ingenious thing, but he had his doubts about mechanical stokers. It might be advisable to open the furnace doors as little as possible, but he believed in thorough good stoking, for stoking was something more than merely throwing green fuel on a fire. The fire-bars they were of all sorts, sizes, and shapes, with various movements for preventing clinking. There were two very peculiar samples of furnace bottoms, the bars dropping in terraces towards the bridge, and there were different movements in the bars for pushing the fuel forward. The show of economisers was a numerous one, and they were nearly all the same in principle, consisting of pipes differing only in their shape and arrangement, which were so placed as to intercept the waste gases for the purpose of heating the feed-water as it passed to the boiler. There was no doubt the economisers effected a great saving in fuel, but it was a great query whether it was to the extent which the exhibitors claimed. There was a splendid show of boilers of one kind or another, especially of the sectional type, but some of them were what might be called old new. This type was becoming one to which serious attention was being paid, and he hoped the matter would be discussed by the society. Taking the boilers generally, there was nothing very new; they all claimed to save 20 or 25 per cent., but he should like to know what this 20 or 25 per cent. meant. He could understand an economiser saving so much fuel, but he did not think it was a fair thing to say that they were saving 20 or 25 per cent. on a class of boiler that would never be dreamt of now. Warsop's new steam-engine to which we have already specially alluded was, no doubt, a matter which would receive a large amount of attention. After a passing allusion to the great fuels for domestic appliances, he said it did seem to him a matter of regret that there had not been any attempt to test by actual experiment any of the appliances. We were not a bit more forward with regard to the real and practical solution of the question than we were before the collection was brought together. We had to be content with what the exhibitors said in their circulars. This could be gathered from their advertisements before, and as we could not refute them we were obliged to let them stand. It would be a great pity if such a collection were to be allowed to pass over without giving a few words of notice. In conclusion, he would observe that it seemed strange that, in the midst of so much in the shape of heat and domestic arrangements, there was not such a thing to be found as a pea fire, and he believed that many of the people went away with the idea that even the makers did not believe in the pea themselves, and that it was only sent for show.

Mr. YOUNG agreed with Mr. Wormald that there was nothing very new in the exhibition, and he was rather inclined to believe that the best of the inventions in existence had not been brought forward, and the reason of this might be that there was an objection on the part of inventors to exhibitions. He thought that would account for the want which they all seemed to feel that the practical experiments in the exhibition were not up to what they had heard spoken of, and what they believed existed. He also thought there ought to be some practical test in the exhibition as to the merits of the various apparatus. With regard to the apparatus for heating air in domestic houses, he thought the important question was raised whether it was good for health.

Mr. JERRARD said that with regard to hot air in houses he thought that if there were any evil effects from it we should have heard of it before, as this system was very generally adopted on the Continent. The great question was really one of good ventilation.

After a discussion, in which a number of members joined, on particular appliances, &c., in the exhibition, Mr. HUNTER said that if there had been no test, the real utility of which was questioned by many people, the exhibition had brought together a variety of inventions, in a manner which enabled them to be seen by the more general public; and had they not been brought together in this manner there was no doubt that many of them would never have been noticed by a large number of persons who had thus had an opportunity of examining their construction.

In some further remarks which were made with regard to the heating of domestic houses, allusion was made to the system exhibited of consuming the gases from the drains in the domestic fire grates, and Mr. YOUNG observed that the furnace fires of one large factory would be sufficient to supply the drains in a city like Manchester. The Chairman said the exhibition had brought together a large collection of stoves, chimneys, &c., of them, and collectively, representing a most important process—the raising of steam-power, and he hoped that, as a society, they would be able to get at some kind of results, which he was sorry to say the exhibition did not afford them. The meeting was then brought to a close with the usual votes of thanks.

## THE EXHIBITION OF APPLIANCES FOR THE ECONOMICAL CONSUMPTION OF FUEL.

The brief outline of the general features of this exhibition, which has already appeared in these columns, we now propose to follow with a descriptive notice of some of the more important amongst the "exhibits":—

## THE DIAMOND FUEL COMPANY.

The strictly artificial fuels are not a numerous class, and comparatively very little opportunity is afforded by the exhibitors of arriving at a satisfactory conclusion as to their composition or respective merits. Amongst them, however, the case exhibited by the Diamond Fuel Company appears to possess special features of excellence. The company are working out Barker's improved patents for the manufacture of artificial fuels from small or dust coal, coke dust, peat, lignite, or any suitable carbonaceous matter, also from anthracite and other dry non-bituminous coals; and amongst the samples which they exhibit are blocks of fuel made from anthracite South Wales slack, Powell's Duffryn South Wales slack, Irish anthracite slack, Cannelock Chase slack, coke from anthracite South Wales slack, and fuel from gas coke refuse. As to the method of their manufacture no explanation is offered by the exhibitors, and it must be passed over with the observation that it apparently consists in reducing the material, if not already in the form of dust, into small granular particles, which are then mixed together into a paste by means of a composition, evidently in large measure consisting of silicate of soda and lime, and afterwards pressed into blocks about 8 in. long by 6 in. square. The blocks of fuel which are exhibited and on examination admit, however, of a more minute description. The completeness of the agglomerating power which has been applied is evident from the very excellent specimens of coke exhibit 4, which are as sound and hard as the best of the kind of this description. The sample made—anthracite South Wales slack—is, we should say from appearance, equal to any even-made coke.

For their fuels generally the company claim that they burn freely, that the combustion is perfect, that it produces less clinker than the raw coal from which it is made, and that as a steam generator it cannot be excelled. These are important advantages; and another, which will be valued where the storage space, as in the case of steamships, is only limited, is that the uniform and convenient size of the blocks admits of the fuel being packed into comparatively very small compass, and we are assured without the risk of spontaneous combustion. One great difficulty in fuels of this description is the liability of the composition to be affected by a warm temperature, but this the company have overcome, as the blocks not only consume without disintegration, but are both climate and water proof. In fact, before being placed in the furnace it is necessary that the blocks should be broken up into fragments. The specimens of fuel made from South Wales and Irish anthracite slacks, which are fractured for the purpose of permitting a more minute examination of their composition, are in their hardness and density really excellent fuel, and in weight they are almost identical with a piece of coal of similar size. A coarser kind of fuel is made from Cannelock Chase slack, and gas coke refuse is utilised into a very serviceable fuel. To summarise the fuels generally, they have all the appearance of being suitable alike for domestic and all kinds of manufacturing purposes, a good guarantee of their excellence being afforded by the fact that they have already undergone successful trials on several railways, at the Woolwich Arsenal, and by a number of large private firms. In the manufacture of the fuels several of Norton and Hawkesley's patent disintegrators are used for reducing the material to the necessary pulverised state, and as this machine is also amongst the appliances in the exhibition we will place it next in our descriptive notice.

## NORTON AND HAWKESLEY'S PATENT DISINTEGRATOR.

This machine is exhibited by Messrs. Carter Brothers, of Mark Lane, London. The simplicity of its construction, together with the efficiency with which it performs its work, are worthy of notice. Before proceeding to a detailed description of the method of its construction, it is necessary to observe that the disintegration is performed on a principle altogether different to the usual method of grindstones, the grinding being effected entirely by percussion, and the machine is constructed to reduce to the finest powder any description of material the grinding of which is essential for the purposes of manufacture; and it is specially adapted for the purpose of grinding in large quantities coal, peat, and other materials used in the manufacture of artificial fuels. The machine consists of a circular beater-chamber, formed by two castings keyed together with swing bolts, and the disintegrator is formed of but one spindle, on which is keyed the pulley, the crusher and the disc holding the beaters. The material to be ground is fed in at the side, when it at once passes on to the crusher, formed by a screw, which in the process of carrying it into the beater-chamber reduces it to small particles. On arriving in the beater-chamber it is taken up by the beaters, working at the rate of 5500 revolutions a minute, and driven in a vibratory, or zigzag, path round the circle, striking violently in its passage against sharp-edged blocks of hematite, until reduced to the necessary fineness, which is regulated by gates placed in the bottom of the machine, and which are easily removable as occasion requires. As to the quantity of work which can thus be performed, we are told that in one of the large machines, armed with six beaters, will reduce, at the lowest computation, 4 tons of coal to small powder in the course of

an hour; and with regard to the hardness of the material which can be ground we were shown a sample of titanite ore which had been reduced by the machine to an exceedingly fine dust.

## TWIBILL'S AND GREEN'S ECONOMISERS.

Amongst the most prominent of the exhibitors are the firms of Joseph Twibill and Edward Green and Son, of Manchester, who each occupy an annex, and show their patent economisers with all the latest improvements. The Twibill apparatus, which is constructed for the purpose of utilising the waste heat and gases from boilers and flues, consists of a series of vertical pipes or tubes, with a 4-in. bore, 28 ft. long, which are placed in the flue between the boilers and the chimney, and thus intercept the waste heat before it is carried away. Through these pipes the feed water passes on its way to the boilers, or other vessels, and is raised to the same temperature Fahrenheit as the heat of the steam in the boiler. From their position the fuel economisers or pipes soon become coated with soot, a non-conductor, and to obviate this sharp-edged scrapers which, by a simple self-acting alternating gearing, work in pairs up and down the pipes about 25 times every hour, are provided. By this means the soot is effectually removed, and the pipes kept clear for the free action of the waste heat. As the scrapers have been a matter of careful consideration with the inventor, and their present construction the result of years of experiment, we will give a few details of their leading features. The improvements which have been effected consist in so constructing the scrapers that they entirely encircle and scrape the whole length of the pipes, and they are up inclined planes or carrying bars, so that they closely grasp the pipes, and keep their position without any complicated fastenings. By a simple arrangement of the carrying bar the scrapers are also fixed and loose, so that while in their action they cannot become displaced they are capable of the easiest removal at the top of the economiser at any time without stoppage. Another important alteration which has been made on the old economisers is the adoption of plain cylindrical top boxes without bonnets, bolts, nuts, or hemp washers, by which means it is deemed that the pipes in use if damaged are more easy of removal; and a set of pipes is specially exhibited for the purpose of showing the process of their withdrawal and insertion. The cylinder, instead of two working joints, is one piece, and the top of the economiser cross ways, and between every pair of boxes there are covering plates, 4 in. broad, easy of removal for inspection or examination of the internal working of the machinery, and allowing of the easy replacement of a pipe without disturbing the brickwork. Another important point is the pitch of the pipes, the joints of which, it may be added, are turned and bored, or planed face to face, and fitted iron to iron, whilst they are tested to six times the pressure of the boilers before leaving the works. The pipes are so pitched both ways as to allow not only room for the draft currents, but for free access to all the working parts, the space being 3½ inches between the external surface of each pipe. We will now turn to Green's apparatus, with the preliminary observation that this firm are the real inventors and original patentees of this class of economiser. In both the leading principles are identical, and it is simply in the carrying out of details that the two makers differ, and to these points it will be only necessary to refer. The pipes are 9 ft. long, with a 4-in. bore, and are put together in socket-joints, which are all made metal to metal, and pieced together by powerful hydraulic machinery, whilst each pipe is tested to a pressure of 600 lbs. to the square inch before leaving the works. The pitch of the pipes is slightly different to that in Green's. The space between the external surfaces being 3 in. one way and 3½ in. the other. The scrapers are also constructed on a different principle, being formed in three segments or movable parts, instead of two working joints. They are also furnished with a hardened thin cutting edge, and rest on inclined planes, which keep them close to the surface of the pipes. Another important difference is that each pipe has on the top a movable cap or lid, so that any single pipe can be withdrawn by simply removing the cap, an operation which, it is stated, does not occupy more than from one to two hours, without either disturbing an adjoining pipe or the brickwork. Both makers claim important advantages for their economisers, and it is difficult to decide between the two; as they have both already undergone a practical test in a large number of works their merits are pretty well known. With the late improvements which have been effected in the economisers their efficiency has been increased, and where they have been tried a saving of from 20 to 25 per cent. has been effected in the consumption of coal.

## GRIFFITHS'S PATENT SAFETY BOILER.

Mr. J. Halliday, of the Palland Works, Manchester, who occupies a large portion of one of the annexes, exhibits Griffiths's patent safety boiler, which is deserving of mention. It is a sectional boiler, constructed on the water-containing tube principle, and possesses many valuable features of importance to the users of steam. The characteristic points of the boiler are that it is constructed with tubes which are exposed to the fire, and connected with a reservoir of water, so that when the boiler is at work there is a free and continuous circulation, horizontally, diagonally, and vertically, the circulation current being so strong that the tubes are kept free from deposit. The feed-water is heated before it enters the tubes, and the fire place is so constructed that the whole of the fuel is utilised. The flame and heated gases envelope all portions of the tubes, and by means of deflectors or shields, constructed of fire-clay, and arranged between the tubes, they are made to pass up and down several times before being discharged into the chimney. To ensure the safety and durability of the boiler the tubes are only 4 in. diameter, and tested up to 500 lbs. to the square inch; provision is also made to counteract the evil effects of unequal expansion, by connecting copper globe expansion joints from the tubes to the drums, or boilers. The inventor claims for this boiler that its evaporating power exceeds that of the multitubular, or Cornish boiler, and that it can be worked at a much higher pressure.

## THE GALLOWAY STEAM BOILER AND ENGINE.

The most prominent exhibit in the whole exhibition is that of Messrs. W. and J. Galloway and Sons, of Manchester, who with this steam-engine, which they show, succeeded in carrying off the diploma of honour at the Vienna Exhibition. The distinctive feature of the Galloway boiler is an arrangement of the internal flue and the cone tubes, but it is already so well known that we need not enter into a detailed description of its construction. The steam-engine is of the horizontal compound type, having a high pressure 14 in. diameter, and a low pressure cylinder 24 in. diameter, with a stroke of 2 ft. 6 in. It has been designed to economise fuel to the greatest possible extent, and is calculated to give out 100 indicated horse power with a working pressure of 70 lbs. to the square inch. In order to avoid wire drawing the steam by passing it through a throttle-valve the governor is placed in direct communication with the slide valve of the cylinder. The steam after passing through the high pressure cylinder goes direct into the condensing cylinder by the shortest passages possible, and an independent exhaust valve of large capacity is attached to the condensing cylinder. The air-pump is on the horizontal steam double acting system, with a diameter of 8 in., and is placed in the rear of the engine, so as to allow a high rate of speed if required. The well-known character of the firm is a sufficient guarantee as to the excellence of the construction of an engine of this class, and the high honours both gained at Vienna render it unnecessary for us to speak in praise of its merits.

SOCIETY OF ENGINEERS.—At the meeting, on Monday, a paper will be read on "Recent Improvements in Tin Dressing Machinery," by Mr. S. Herbert Cox.

PREVENTING OVERWINDING.—A modification of Ormerod's patent detaching hook invented and patented by Mr. W. Walker, M.E., of Saltburn-by-the-sea, and manufactured by Messrs. Walker and Sons, of Birmingham, was tried at the Wyndham Pit, Ogmore Valley, on Monday. The hook consists of a pair of jaws, working on a centre pin like shears or scissors, and the upper portion of these jaws in the process of winding up passes through a stationary ring (fixed to a girder), when the load is raised to a given point. The load then acts as a lever upon the lower part of the jaws, and the upper portion opening, releases the rope, but not until the jaw-hooks have a firm hold on the supporting ring. An illustrated description of the invention will be published in next week's Journal.

PRACTICAL MAGAZINE.—In last week's Journal the first portion of a highly interesting article, "On the Industries of North Wales," was reprinted from this magazine, and will suffice to show that the excellent character of the work to which we have frequently referred is well maintained. The next article, on Bells, Bell Metal, and Bell Founding, contains a vast amount of useful information; and Mr. Hayward's report on the relative value of granite, wood, and asphalt paving will supply all the facts that could be desired on the subject. Horses appear to be most liable to fall upon granite, and least liable upon wood, asphalt occupying a middle position, at least being somewhat less safe than the best of pavement, such as is now laid down on Ludgate Hill, for the Post Office. Lignite Mineral seems to occupy a very low place in the scale of safety. We would suggest, however, that too much weight should not be attached to the conclusions put forward in the report, for in truth the falling of horses in the London streets appear to depend upon circumstances totally distinct from the nature of the pavement. Where the traffic is regular the falls are few, whether the pavement be granite, asphalt, or wood, the chief falls being in stopping, starting, or checking the speed. Where the roadway is contracted by a couple of feet, or by the stoppage of a vehicle for loading or unloading, there the falls are greater, provided the traffic be great enough to make the stopping, starting, or checking of the vehicle a necessary proceeding. Mines and Mining in Hungary, Manufacture of Paper Hangings, Native Iron Furnaces of Malabar and their Produce, and the History of Technology, are each articles of very attractive character, and the selections embrace under the general heads of the Practical Note-Book of Technical Information Useful to Students and Workmen, Chemistry Applied to the Arts, Metallurgy, and Chemical Manufactures, and allied subjects from foreign periodicals appear to have been made with sound judgment. From the nature of the contents and the excellence of the printing and illustrations the "Practical Magazine" should be acceptable to every man of business, and will form a handsome ornament for his library.

CURE OF BRONCHITIS, ASTHMA, CONSUMPTION, AND COUGHS, BY DR. LOCOCK'S PULMONIC WAFERS.—Mr. Clifton, 45, Fleet-street, Bury, writes:—"I have great pleasure in recommending the wafers, knowing that they are a sure remedy," &c. In asthma, consumption, bronchitis, coughs, colds, gout, rheumatism, and all hysterical and nervous pains, instant relief is given by Dr. Locock's wafers, which taste pleasantly. Sold by all druggists, at 1s. 14d.

KNOWLEDGE AND SYMPATHY.—Good spirits may be readily restored to the late fortunate owner by a few doses of Halloway's re-vivifying medicine—Instant action alone is wanted to prevent the development of more disagreeable and dangerous symptoms. Everyone has frequently experienced sudden personal changes from gaiety to gloom. The weather often times resolves the blame, when a disordered stomach alone is the cause of the depression. Halloway's pills can be honestly recommended for regulating disordered stomach and improving digestion. They entirely remove all sense of fulness and oppression after eating; they clear the forced tongue, and act as a wholesome stimulant to the liver, and as a gentle agent to the bowels. They healthfully arouse both body and mind.



## FEB. 28, 1874

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## MINING NOTABILIA.

[EXTRACTS FROM OUR MINING CORRESPONDENCE.]

**CHAPEL HOUSE COLLIERY.**—The output and profits during the past month have been up to the average. We understand that a dividend of 15 per cent will shortly be declared, and that after doing this the company will be able to carry forward a balance more than sufficient to pay another at the same rate. The management is being conducted with the utmost skill and energy, and there can be no doubt that this will prove a good and lasting property.

**GLANSEVERN.**—The news from this mine is of a satisfactory character. The works are being pushed on with all speed, and during the past week a fine vein of lead has been cut in the shaft. This, no doubt, will prove to be in connection with the bunch of ore cut in the adit, which in this case would be of some length. The matrix of the lead is all that could be wished, and there can be no doubt that a good mine will be opened up.

**TAN-YR-ALLT.**—In the Journal of Feb. 14 a paragraph on this mine (from a correspondent) was published. We are assured on the best authority that almost every statement made is untrue, and it winds up by saying misrepresentations have been made as to its worth. The mine was thoroughly examined by two of the present directors before purchasing. It is paid for wholly in shares, though there is upwards of 1000l. worth of saleable machinery on the mine, and, finally, about 30 tons of lead were sold from very shallow workings. Your correspondent says he gave his opinion of this mine twelve months ago. Query, to whom? As the mine has been full of water for two years I leave you to judge of what value his opinion must be.

**AT NEW ROSEWANE MINE** in stopping above the 104 a good discovery of copper ore has been met with; the lode is 3 ft. wide, and will produce fully 5 tons of copper ore (worth about 7l. per ton) per fathom. If this discovery should continue for a few fathoms, which at the present moment it promises to do, the mine will very soon have a good parcel of ore for sale.

**EAST WHEAL GRENVILLE** has lately considerably improved in the 120 west, where there is the best lode for tin ever before seen in the mine, and the ground is so favourable that two men will have driven 5 fms. during the past month.

**WHEAL MARY** sold last week 4 tons of black tin, which had left the mine before it could be stopped by the directors' letter. The remaining tin in the mine before it could be cleaned the directors have determined to hold for a time, considering tin to be at the lowest figure, and for which purpose they have raised a temporary loan of 8000l. on mortgage to free the mine from merchants' debts. I consider this a wise step, as in all probability the enhanced value of tin will far more than double the interest to be paid for the loan. If a few more mines from which large returns can be made would adopt this course we should see tin at a better price.

**BURRA BURRA (Kenwyn).**—One of the agents of this mine, writing to one of the shareholders, says, "The lode in the engine-shaft is improving every foot we sink, and I have not the least doubt that this mine will prove very productive." This account rather confirms the opinion expressed by Capt. Dunstan, that as soon as they are through the elvan they will have a good course of copper.

## MEETINGS OF MINING COMPANIES—(Continued).

**RYMNEY IRON COMPANY.**—At the meeting, on Wednesday, a dividend was declared of 2l. per share on the 50l. shares, and 12s. on the 15l. shares, free of income tax, payable on March 12.

**NANGLETS.**—A meeting was held on Wednesday, Mr. Granville Sharp in the chair. The accounts for 16 weeks up to Jan. 17 showed a debit balance of 210l. 13s. 3d.; the arrears of call at the last meeting amounted to 1305l., which had been reduced to 506l., and the merchants' bills from over 2000l. to 1500l. The report of the agent was read, and Capt. Rowe (the manager) explained that in driving the cross-cut commenced a few months since four lodes had been intersected, each containing a considerable amount of iron, of which the cross-cut was started for, and which when last worked, some 25 or 30 years since, yielded tin to the value of 10,000l. from the 40 fm. level to surface. This cross-cut would open up a separate mine entirely free from that influx of water which had been so troublesome to them. The water in this new section of the property was very easy, and the machinery on the mine was equal to taking them down 50 or 60 fms., and stamping apparatus for any quantity of tin they might raise. Their exploring cost would be somewhere about 800l. per month, against which there would be what the tributors might raise. He computed some nine months since that the cross-cut would cost 1200l., whereas up to the present time the outlay had been only 900l.; the ground had been easier than expected, and the costs less. The accounts were passed and allowed. A call of 1s. 3d. per share was made. A vote of thanks to the Chairman closed the proceedings. [The report is among the Mining Correspondence in another column of this day's Journal.]

**SOUTH TOLCARNE.**—At a general meeting, held at the offices of the company, Austinfrans, on Friday (Mr. D. Fraser in the chair), the financial statement, showing four months' cost to the end of January, and including the balance of engine, 4500l., showed a debit balance of 755l. 4s. 5d. A call of 150l. (2s. 6d. per share) was made. The agent's report, which was considered very satisfactory, will be found in another column.

**SPEARNE CONSOLS.**—A meeting of shareholders was held at Penzance, on Thursday, the purser (Mr. White) in the chair. It was resolved, after a considerable discussion, that the mine and materials should be offered by auction as a going concern, in one lot; but that, in the event of no sufficient bid being made, the mine and materials should be offered to the lord. The mine is adjacent to Levant and Botalack, and is 160 fms. deep; it has been working about 50 years.

**FORTESCUE.**—The third annual general meeting of shareholders was held, yesterday, at the offices of the company, New Broad-street, the Rev. H. M. E. Desmond in the chair. On the conclusion of the general business, which consisted of the reception of the directors' report and a statement of accounts, the meeting was constituted special, when after a prolonged discussion the following resolution was carried:—"That it having been proved to the satisfaction of the members that the company cannot, by reason of its liabilities, continue its business, and that it is advisable to wind up the same, the Fortescue Tin Mining Company (Limited) be wound up voluntarily under the provisions of the Companies Acts, 1862 and 1867."

**SOUTH GREAT WORK.**—At the general meeting, on Thursday (Mr. Granville Sharp in the chair), the accounts for the four months showed a debit balance of 942l. 11s. 11d. A call of 4s. 6d. per share was made. The agent's report was read, and a vote of thanks to the Chairman closed the proceedings.

**WEST GREAT WORK.**—At the general meeting, on Thursday (Mr. H. P. Holford in the chair), the accounts showed a debit balance of 1137l. 7s. 9d. A call of 5s. 6d. per share was made. The agent's report was read, and a vote of thanks to the Chairman closed the business.

**EAST BASSET.**—A meeting of shareholders was held on Friday, Mr. H. L. Phillips, F.R.S., the purser, in the chair. The accounts for six months ending December showed a debit balance of 3274l. The purser said the only way of treating the matter was by making a call to wipe off the balance against them, and as an honest man this was what he should recommend them to do. Remarks having been made by some of the shareholders respecting the desirability of keeping out of debt, it was proposed by Mr. Harris, and carried unanimously, that a call of 7l. per share be made. The agents' report was then read. Capt. Pryor fully explained it, and said that looking at the valuable and important discoveries made in the bottom of the mine, he should recommend a vigorous prosecution of the tin lode in depth. He held a tolerably large interest, and saw no reason whatever for not prosecuting the workings with vigour. Mr. William Harris said that when Wheal Basset was in difficulties, 30 years ago, he decided upon increasing his interest, and recommended some of his friends to do so too; and he was happy to say that the result had been a profit of more than 10,000l. on the shares he referred to. There was nothing that paid so well as holding on where the mine was in a good district. He had held on in Wheal Basset for 40 years, and had been well repaid for his outlay. The report of the manager and agent, Capt. R. Pryor and N. Bartie, went fully into the whole of the operations of the mine. Since the last meeting a large amount of ground has been laid open, which will pay well for taking away. Within the last three or four days a rich deposit of grey and black copper ores has been discovered in the 110 fm. level, which is in whole ground from this point to the surface; and that in the bottom of the 110 fm. level, on the tin lode, a valuable discovery has been made, the lode being of considerable value for 34 fms. in length. Some very rich stones of black and grey copper ores were shown, which had been raised that day from the new discovery in the back of the 110 fathom level, and which had been previously referred to.

**WHEAL VINCENT.**—At the meeting, on Thursday, at the London Inn, Liskeard, a call of 1s. 6d. per share was made, and the appointment of Capt. Terry as manager was confirmed.

**WEST WHEAL TOLGUS.**—At the meeting, on Saturday, a loss was shown on the two months' working of 1018l. The total expenditure was 3151l., and the receipts for copper 2132l. A call was made of 2l. per share. It is now hoped that they will pay costs. The costs have been increased by about 3000l., in consequence of the alteration in Richards's shaft.

**WHEAL UNITY WOOD.**—At the meeting, on Feb. 19, a debit balance was shown of 1201l., to meet which a call was made of 2s. 6d. per share. No dinner was provided on the occasion.

**KILLFRITH.**—The quarterly meeting was held at Falmouth, on Thursday, when an excellent report was presented. In spite of the great fall in the price of tin no call was required for the payment of the 20-in. pumping engine, together with its erection, and the pitwork necessary to drain the mine (80 fms.), sufficient tin being at surface to pay for all. This mine has raised no less than 6000l. worth of tin in eight weeks, of which one-half is clear profit. It is quite hoped that under the present management it will become a valuable property.

**NORTH ROSKEAR.**—At the meeting on Tuesday it was resolved to discontinue the working of the mine, Captain J. Vivian stating that the mine was poor, and that he did not see much chance of its being made to pay. It was agreed that the holders of 400 out of the 605 shares had determined to retire. For some time past the quotation for metallic tin is 110l. to 111l. per ton, yet the mine is losing about 300l. per month, and Captain J. Thomas did not see how it could be fairly worked with less cost for some time to come. The price of coal, has been. Mr. Husband believed that shortly mines would be worked 3s. per ton, cheaper than they are now, and suggested trying to tide over. Capt. V. C. Vivian considered the stopping of North Roskear the first blow struck at the adjacent mines, and said it did not necessarily involve the flooding of Roskear has been at work for more than 60 years, and with a capital of 51,115l., 300 fms. deep from surface. A new lease is obtainable at a low rate of dues, and it was resolved to offer the materials to the lord, if declined, to sell them by auction.

**NEW PEMROKE.**—At a general meeting of adventurers, held at the mine on Feb. 17 (the Rev. Dr. Trevelyan in the chair), the accounts for 16 weeks ending Dec. 6 showed a debit balance of 3151l. 13s. 1d. A call of 2s. 6d. per share was made. The purser was empowered to tender at the bank to the extent of 2000l. in the purpose of enabling the tin to be withheld for a better market. Capt. F. P. Kelly and C. Barrett say: "During the past 16 weeks we have returned about our

usual quantity of tin, nearly 50 tons, but we regret to say that the price of tin in the past 12 months has declined more than 22l. per ton, while coals and other materials, and labour still maintain their high prices, hence the reason of the debit balance, as shown in the accounts presented to you this day."

**ROSEWALL HILL AND RANSOM UNITED.**—At a general meeting of shareholders, on Feb. 18, the accounts showed a profit of 145l. 15s. 7d. on 12 weeks working, and a balance now against the mine of 551l. 10s. 8d. It was resolved "That this mine be conducted on the former system of 12 days in the year, to commence from next setting-day," and, owing to the reduced value of tin, that the tributors be paid at the rate of 300l. per ton. Capt. W. Buglehole and J. White say:—"We have now employed underground in this mine 120 men—82 on tubwork and 38 on tribute. At surface 23 men and 38 boys and girls; total, 151 persons. We have again to express our deep regret on account of the recent heavy decline in the tin standards, and the continuous high price of coals and other materials, but we are happy to add that our prospects are very cheering, and should they continue we believe that by a vigorous and economical development of our present points of operation we shall be able to tide over the present great depression without loss to the shareholders."

**CESENASULPHUR COMPANY.**—The report of the managing director, Mr. F. Kossuth, for the past year states that since July the average monthly production has more than doubled, being now 5000 tons of mineral, equal to 700 tons of sulphur, per month, which he expects will soon increase to 1000 tons per month. The total production in 1873, the first four months being idle, was 3192 tons of sulphur, the average cost, free at railway station, being 116l. 51c. (4l. 6s.). The net profits are estimated at 2l. per ton. The loss in remelting and refining has been much reduced. The underground fire and landslip deprived the company of most of the benefits of the works left by the former proprietors, and paid for by the company. Owing to the writer's very limited acquaintance with English, it is difficult to understand much of his report, but it seems that the company has a debt (a positivity on capital account) of 3,5,000 lire, which he does not consider alarming, and proposed to regularise by creating a mortgage on the mine to pay it off, and provide working capital, the want of which compels the company to sacrifice 17 per cent out of the profit during the half of the year when there is no demand for sulphur for agricultural purposes. Otherwise he proposes that the dividend for the past year should be foregone. He believes the second half of 1874 will show a considerable increase on present production.

**MARBELLA IRON ORE COMPANY.**—The balance-sheet to end of December, 1873, prepared for presentation to the shareholders, shows an available cash balance of 25,565l. 10s. 7d., and a profit on the year's operations of 6904l. 3s. 6d. The report is less favourable than the directors anticipated. It was stated in last report that the expense of raising the ore by mining would be greater than it had been by open working, that until larger underground workings were open the output could not be materially increased, and that without increased output it would be impossible to run off the old contracts and gain the benefit of higher prices. The continuance of these adverse circumstances lies the sole cause of the comparatively small amount of profit earned during the past year. The yield of the new galleries was only 2000 tons, but it is now increasing, and will do so more rapidly when the steam-drills, now being manufactured for the company, are in operation. The arrangement of matters in dispute with the trustee of the Messrs. Malcolm has been completed on terms favourable to the company: 50,000l. of stock is practically cancelled, and the royalty of 6d. per ton has been made over to the company in perpetuity, the benefit of which will be more felt as the output increases. The pier, railway, and plant are in excellent order, and sufficient to undertake more work than the mines can provide for them, and the directors are now negotiating the carriage of ore from a single line, which, if arranged, will save a large profit to the company. The rapid increase in the price of coal caused the directors to postpone the intention expressed in last report of purchasing steamers to do the carrying trade, and they see no reason to regret that postponement. The directors, impressed by the difficulties in which the company has found itself by the existing contracts (all of old date) exceeding the yield of the mine, have directed their attention to their termination. In January, 1874, the outstanding contracts amounted to 252,484 tons. They are now 128,326 tons. It will thus be seen that the directors have succeeded in cancelling contracts to a considerable extent, and thus have brought nearer the time when the company will be in a position to obtain higher prices. In order to secure the management, Mr. Broadfoot, the managing director at Marbella, has been brought home to combine the duties of manager and secretary. Mr. Inwards, resident engineer at Marbella, now acts there as manager also. Mr. Clipperton, in consequence, leaves the service of the company, and the directors wish to express their high sense of the value of his services as their secretary. Other considerable changes have been made in the staff in the direction of economy, and the offices have been removed to Queen Victoria-street, at a much lower rent than before. Out of the balance of revenue account 6904l. 3s. 6d. profit, and 111l. 8s. 6d. brought forward=7015l. 12s., the directors recommend a dividend of 6979l. 3s. 4d. (5s. 7d. per share), leaving 30l. 8s. 6d. to carry forward.

(For remainder of Meetings see to-day's Supplement.)

**ORIGINAL HARTLEPOOL COLLIERIES.**—The members of the Press are not admitted, because the colliers don't like the plain truth as spoken at such meetings, and the directors, from feelings of delicate consideration, wish to give the much-injured colliery workers as little offence as possible. It appears they work only 24 hours a week, for which they are well paid—75 per cent. more than they formerly received—and that recent legislation prevents the company from working the property as it should be worked. Old King Cole was a jolly old soul, but the colliery kings seem to be neither jolly nor wise, or they would work at least 48 hours in a week while pay is so good, and lay by for the future enjoyment of the *odium cum dignitate* when continental coal workers are introduced, like German tailors were. The report and accounts were passed, and the proposed additional dividend of 5 per cent. authorised. The directors were re-elected, and after complimentary votes to the solicitor, secretary, and colliery manager, the meeting separated.

**FESTIVITIES AT ST. JOHN DEL REY.**—The *fetes* of the new year were unusually attractive this year at Morro Velho, owing to the additional festivities and amusements arranged to commemorate the successful completion of the vertical shafts, and the commencement of active operations in the new mine. The employees' dinner, held on New Year's Eve, in the upper part of the company's store, which had been lately decorated for the occasion, was a very brilliant affair, the toasts commencing with "The Queen and Royal Family" (followed by the singing of "God Save the Queen"), including the Chairman and Board of Directors, and the Superintendent, Mr. J. V. M. de Almeida, and the company, and the custom of the country, concluding with "The Emperor and Imperial Family," which was most honoured, and was followed by the Brazilian National Anthem. New Year's Day was kept as a holiday by the whole establishment, and in the evening the officers' ball was held, lasting until daybreak the following morning. On Friday the superintendent held a *surprise* at the Casa Grande, and on Saturday the younger members of the establishment, after races on the campo, were regaled with tea, the week's festivities terminating on Monday with a dinner to the waiters and servants. For the first four years after the fire a limited supply of fair mineral was obtained from various shallow localities, to assist in paying the expenses, but since February, 1873, all such advantages have ceased, in consequence of the falling in of the Bihu, Cahecho, and Gamba Mines. The superintendent of the company was fortunate in providing advantageous employment for the large body of workpeople suddenly thrown out of mining occupation in the construction of provincial public works. The Morro Velho mining force is now being increased to adequate proportions for the proper development of the fine lode now so exactly laid open for working.

**RICHMOND COMPANY.**—A fine body of ore has been struck in the Diable Mine, in Hoosac Mountain. The mine is bonded to the Richmond Company for a large amount, and it was while the company were developing the mine they struck the ledge. All the mines are looking well, and a number of men are employed in the further development of the district. The discoveries in this section are valuable, from the fact that the ore taken from these mines, and mixed with the carbonate of Ruby Hill, produces a higher grade of bullion than when worked separately. As soon as the weather becomes settled, and transportation facilities for the ore it is expected that these mines will be worked to their full capacity. —*Eureka Sentinel.*

From Mr. ALFRED E. COOKE (76, Old Broad-street):—Extreme depression still exists in the mining market. If there had been more business doing a panic in tin shares would have resulted from the total absence of buyers at present prices. During the month of February alone Cornwall shares have dropped about 15l. each. Cook's Kitchen, 6l.; Dolcoath, 11l.; Tincroft, 5l., and almost every share has depreciated to a great extent. Cornwall is suffering keenly. Mines are being stopped one after the other, while at many mines operations are being confined to the narrowest limits, and with the lowest possible expenditure. It is not that there is a tin mine in Cornwall pays at present. Nevertheless, there are many investors who have courage to take advantage of this season, being confident that this state of things will not long continue. Certainly the production of tin from Cornwall will be much diminished, and this will cause a rise in the price of the metal, if no large quantities come from Australia. It will be seen that the "five-weeks" system of pay is being returned to, from a growing conviction that the old system was the best for all concerned. When Cornwall was flourishing the "four-weeks" pay was introduced, salaries raised, testimonials presented—in fact, shareholders were too liberal. In spite of the dulness in the market for heavy-priced tin shares, there has been more enquiry for Van Consols, Rookhope, Valley, Beg, West Tankerville, East Lovell, and a few others. Shares in the above mines are cheap, and might be purchased to advantage. Colliery shares have commanded a fair amount of attention. There has been a good demand for United Bituminous shares, and they are very scarce at present price—22s. 6d. to 27s. 6d. Besides the daily output of coal from these collieries, a great feature is the manufacture of fire-bricks. It is calculated that when the erection of the kilns is fully completed this department alone will prove so remunerative as to yield a dividend of 15 per cent. on the capital issued. In next week's Journal will be found the prospectus of the Glaisdale Whitestone Quarry Company. The produce of this quarry is used most extensively in Yorkshire for manufacturing roads, and there is a demand for any quantity of stone in the neighbourhood alone, so that it is not necessary to go very far for a market. This quarry does not partake of a speculation, as the stone is known to exist, and is laid open and being returned. There is no fear of the stone falling off in value or cutting out, as a lode does in a mine. I should be pleased to forward a prospectus to anyone who may apply to me, and I would urge a careful perusal of the reports. From a thorough personal knowledge of the quarry I can strongly recommend it as being entirely free from ordinary risks. Already many enquiries have been made for prospectuses, and I advise an early application for shares.

**MAUGHOLD HEAD MINING COMPANY (Limited).**—The Master of the Rolls has fixed March 5, at his chambers, in the Rolls yard, Chancery-lane, as the time and place for the appointment of an official liquidator.

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## Mining Correspondence.

## BRITISH MINES.

**ABERDEENFANT.**—8. Fox, Feb. 25: The men have finished putting in stall and other timber to secure the ground below No. 2 adit, and have commenced stopping again at the intermediate level by four men, for the month, at 5l. 10s. per cubic fathom; this stop is worth 10l. per cubic fathom for lead. In the No. 2 adit driving east we have got into the forebrest. The south and soft part of the lode which we are carrying is 5 ft. wide, and is composed of clay-slate, sulphur, and nice carbonate of barytes, with a very kindly appearance. We have blasted three holes in the north side just to prove it, and have broken from these some very good stones of lead. I am thinking to drive on 2 fms. further before I take down any of the north part, when we shall be in far enough to put up a rise to come over the No. 4 stop, and begin at once to break lead from it. We are driving this level by five men, at 6l. 6s. per fathom.

**ABERYSTWYTH (Silver Lead).**—John Trevelyan, Feb. 23: I have nothing fresh to report in either of the levels of the 86; the lode does not look quite as well, but it is accounted for by the appearance of a channel of ground crossing the end at right angles with the lode. I mention this, as I said in my last report that the lode was to be taken down by Saturday, and I would write the result. A few days, however, and the cross-measure will disappear. We set the following bargains:—The 86 east, to six men, at 9l. per fm.; the 86 west, to six men, at 8l. per fm. The tribute pitches to eight men till the end of April, at 7l. per ton.

**ASHLEYTON.**—M. Whitford, Feb. 25: In the 40 west the lode is not cut through, but as far as can be seen it will yield from 3 to 4 tons of lead per fathom. Nothing of the point of horse is seen as yet, consequently, in my opinion, the part of the lode that yielded lead in the 30 is still south of this, which will be proved as early as possible. No particular change in the various other bargains throughout the mine.

**BAMFYLLDE.**—S. Mitchell, Feb. 25: Our settings on Saturday last went off very satisfactorily, when the following bargains were taken:—The slope in back of the 112 at 5l. per fathom, the lode yielding 1½ ton of rich copper ore per fathom. The 102 to drive west of shaft, at 9l. per fathom; here the lode is 6 ft. wide, and from general indications it is likely to be a productive one; at the present time it is yielding 1 ton of copper ore per fathom. Four stops in the back of the 102 fathom level, at 3l. 12s. per fathom, yielding in the aggregate from 8 to 10 tons of copper ore per fathom. The cross cut in the 70, driving towards the great copper lode in the eastern hill, is extended about 15 fms., leaving about 10 fms. more to drive to reach the lode, at a cost of 3l. 10s. per fathom. The lode recently discovered in the 40, driving east of the engine shaft, is a strong and masterly lode, and from its general appearance indicates that we are bordering on something of great importance. By this post we send you a plan or section of our operations, so that you will see exactly where we are. Iron Mines: We have commenced driving on the 102 level of Stowford, at the bottom of the new shaft, and the lode at this point will produce 30 tons of rich iron ore per fathom. The new lode last discovered at Crohorne is yielding fully 15 tons of iron ore per fm. All the other iron lodes will yield about their usual quantities of ore, and the mine is looking well throughout. We shall ship another cargo of copper ore for Swansea on Thursday next.

**BEDFORD CONSOLS.**—G. Rowe, J. Mitchell, Feb. 25: We are forcing on the sinking of the sump-winch below the 57 with all possible speed, in which the lode is 4 ft. wide, yielding cupels, spar, and muddle, mixed with good quality yellow copper ore, and hope to be down the required depth to commence cross-cutting towards the north lode by the end of the present week, when we purpose to fix a new driving lift, and keep the working drained by the application of the water wheel.

**BEDFORD UNITED.**—W. Phillips, Feb. 25: Operations are continued by the side of the lode generally. We shall prove the lode throughout the mine, and give a full report next week. There is no change to notice in the stops.

**BOG.**—W. T. Harris, J. Delbridge, Feb. 24: The engine shaft has been sunk 2 fms. 1 ft. 6 in., making the depth 10 fms. 2 ft. 6 in. below the 163, and the sinking is being continued by the same number of men, 16 in number, and in another three or four weeks we hope to be deep enough for the next or 175 fm. level; the ground is favourable for progress, and the lode producing some good blende and rich stones of lead; for want of ventilation we have been necessitated to divide and ease the shaft, which will be completed to night. In the 165, both east and west, very little has been done in them for want of men. The cross cut driving north at the 130 has been extended 4 feet; the ground indicates a change, which will facilitate progress; set at 9l. per fathom. The 80, driving east, is set at 5l. per fathom, and 30s. per ton for blende; the lode is improving in appearance and value as we advance, and in about 11 fms. more driving we shall be up to a winze now being sunk below the 32, and by the time the end is up to it the winze will be down, and thus open out a section of ground that will leave a good margin of profit on the working. In fact, we look upon this eastern part of the mine as being only in its infancy, and by continuing the 50 as well as the 32 and 80, and opening thereon a quantity of water courses to issue from the lode, which I consider a favourable prospect for the future. The winze above mentioned is now down 5½ fms., and is set to sink by four men, at 8l. per fathom. The pitches throughout the mine are yielding lead, especially those in bottom of the 163, and are re-set monthly at the same prices for lead and blende as last month. To-morrow we set 40 tons lead and 50 tons blende. Surface and other work progresses without interruption.

**BOWDEN HILL.**—J. Goldsworthy, Feb. 25: In the adit level driving south good progress is being made; the stratum is congenial for the production of manganese.

**BIONELLOYD.**—John Davis, Feb. 25: I have nothing of importance to report this week. The mine is looking about the same as stated in my setting report of the 11th inst. The drawing and dressing of ore-stuff was stopped during the last and previous week by the breakage of the hauling wire rope, but we have now a new one from Scott Brothers, of Manchester, at work, and are hauling regularly. We have sent 8 tons of clean ore over the wire tramway to Cwm bwa stores to-day, and, weather permitting, shall have another 8 tons ready by to-morrow week.

**BRYNAMOR.**—G. Spargo, Feb. 25: There is an improvement in the 32 east, and judging from the present appearance of the forebrest a further improvement is near at hand. The 32 west is much the same as for some time past, but a large quantity of water continues to issue from the lode, which I consider a favourable prospect for the future. The shaftmen are now making good progress in cutting pit-lift, which would have been completed ere this but for the unavoidable breakages that have occurred. I think and hope, however, that it is all safe now. The new machinery is working well, and we are clearing the rubbish that has been lodged in the 22 with all possible speed, and ere the week ends we shall be hauling leadstuff from the slope for market. The level driving east on the footwall of the lode in steps in back of the 22 is without change, but of a kindly appearance, and produces occasional stones of lead; as soon as we get the stuff away we shall resume stopping. It is now evident to me that the footwall of the lode has been below where we have been working, and that the lode is in back of the 22. Therefore, after we get the mine clear of stuff I think it will be advisable to cross-cut further at the 22 and 32 fm. levels.

**BURROW AND BUTSON (St. Agnes).**—J. Christopher, J. Mayne, Feb. 25: Since last week we have had a cross head in the level at the 62 west, but now we are through it, and the lode has again assumed its former appearance; the size is about 3 ft., and the flookan 6 in., which makes the width of the lode 3½ ft. between the walls. The nature of the ground is changed from a blue killa to a lighter colour, which is more favourable to the production of copper.

We are now in about 55 fms. at the 40 west, and the lode is about 4 ft. big, which will yield a good blende per fathom, strongly mixed with copper. When you have a quantity of steam and water power, this will make an additional source of profit. But in the course of the coming week we expect to get in over the lead ground we have met with at the 50, your great object in having the 40 cleared and pushed on. We are now in about 50 fms. at the 20 west, and the clearing is continued.

In the 20, east of Tonkin's shaft, the lode looks more favourable, having left a slide which we had last week, and now carrying again good stones of lead and blende.

**BWADRIN CONSOLS.**—R. Northey, Feb. 24: The lode in the 45 fm. level, driving east of the Wynne shaft, is 5 ft. wide, producing a strong mixture of lead ore and blende, the lode in which is not to value. To stop the back of the 60 east by four men, at 5l. 10s. per fathom; worth 8l. per fathom.—South Lode: The 30 fm. level, driving east of the Wynne shaft, is 5 ft. wide, producing a strong mixture of lead ore and blende. The winze sinking in the bottom of the 55 fm. level, east of the Wynne shaft, is worth 1 ton of lead ore per fathom. There is no alteration in the character of the lode in the 55 fm. level, driving west of the Wynne shaft. We had a breakage of the flat-rods in the side of the hill on Friday last; however, with great trouble we shall put them all right this morning. We are getting on as fast as possible with the dressing.

**BWLCH CONSOLS.**—R. Northey, Feb. 24: Our work in the 82 fm. level has been retarded, in consequence of the frost stopping the large pumping-wheel for some time; in the meantime the men were getting up the bucket and other rods from underground, and assisting the smith to put in new joints, a great many having become worn out and unsafe. The men, however, are now busily at work in the 82, and the machinery is working well.

**CAEGYON.**—T. Hodge, Feb. 26: Setting Report: To stop back of the 70 west level by four men, at 4l. 10s. per fm.; worth for lead 9l. per fathom. The 70 east end to two men, at 10l. 10s. per fathom, the lode in which is 8 ft. wide, worth 8l. per fathom, and letting out water freely. The 60 west end to two men, at 10l. 10s. per fathom, the lode in which is 8 ft. wide, worth 8l. per fathom. To stop the back of the 60 east by four men, at 5l. 10s. per fathom; worth 8l. per fathom.—South Lode: The 30 fm. level, driving east of the Wynne shaft, is 5 ft. wide, producing a strong mixture of lead ore and blende. The winze sinking in the bottom of the 55 fm. level, east of the Wynne shaft, is worth 1 ton of lead ore per fathom. There is no alteration in the character of the lode in the 55 fm. level, driving west of the Wynne shaft. We had a breakage of the flat-rods in the side of the hill on Friday last; however, with great trouble we shall put them all right this morning. We are getting on as fast as possible with the dressing.

**CARN CAMBORNE.**—G. Rowe, W. Penberthy, Feb. 21: The north lode, in the deepest point going down below the 95, is over 7 ft. wide, of a most promising appearance, yielding copper and tin to the value of 35l. per fathom, and showing indications of further improvement, and from present appearance changing its underlie, taking a southerly dip towards the perpendicular engine shaft. The lode in the slope east of the said winze is 4 ft. wide, worth 20l. per fathom. The lode in the 81 is worth 8l. per fathom.

**CEFN BRWYN.**—J. Paull, Feb. 24: The driving of the 104 east has been resumed; lode here without any material change, containing good branches of lead ore; there has been but little done since last report, owing to the water in the lode. The lode in the two pitches over the 104 east is 5 ft. wide, worth 10l. per fathom. In the pitch over the 80 and 56 east the lode will produce from 15 cwt. to 18 cwt. of lead ore per fathom. The dressing, &c., has been retarded a little by the severe frost, but all things are now going on regularly, and good progress is being made towards another sampling.—P.S.: I am daily expecting true to send off the last parcel of ore.

**CENTRAL VAN.**—J. Trevelyan, Feb. 26: The pitwork is now complete in the engine-shaft, and everything in connection with it works admirably. Nine gold men are engaged in sinking the engine-shaft 12 fms., at 18l. per fathom; this is being pushed on with as much dispatch as possible. The deep adit cross-cut is being driven by four men, at 5l. per fathom, and since the new rails are laid down the whole distance the men are making good progress towards the Van lode.

**COIT GRANGE.**—Feb. 25: The water is now down 11½ fathoms in the engine-shaft, and as soon as the footway is completed we will be enabled to get into the No. 1, or adit level. No alteration to notice in Elgar cross-cut, or Elgar's, &c., are now engaged fixing water wheel at the eastern mine, on Brozgin (1 and) this will be completed next week, and we shall then only require ladders, erecree and rods fixing to commence work here. The mason is repairing drawing-wheel and building dressing machine house.

**ST. WHEAL ABRAHAM UNITED.**—Wm. Thomas, J. Vivian, James Hamill, Feb. 25: Start of Engine Shaft: In driving the 215, west of shafts



the backs of the level at the bottom of the Chimney Pipe rise to lodge the ore shaft at the bottom of mill. We are now stoping and rising up above the middle adit level, and are breaking some fine stones of lead ore. The bottom workings are now well ventilated.

**PERRAN CONSOLS.**—J. Juleff, J. Nance, Feb. 25: In the 40 fm. level crosscut, west of the flat rod shaft, the lode is opened on 2 fathoms; in this distance it is of a most promising character, and worth 6% per fathom. In the 40 fm. level



end, east of flat-roof shaft, the lode is worth 10/ per fathom. The stope behind this end are not looking as well as when last reported, notwithstanding it is a very fine-looking lode. At the flat-roof shaft we have a pair of men cutting plat, and preparing for sinking the shaft below the 40; this shall have our best attention. In the 40, north of Hallett's engine-shaft, the lode is now intersected, and we expect to see more of it next week as far as cut into, producing good stones of tin. Nothing has been seen of the lode in the 30 cross-cut, south-west of Hallett's. The 20, west of Hallett's, is worth 4/ per fathom.

**PERSEVERANCE.**—Wm. Rich, Wm. Hambley, Feb. 25: We have sunk through the hard clay in the engine-shaft, below the 50 fm. level, and have killed in the deepest point; we hope now to make good progress in sinking. The ground in the 60 west is easy for driving, but the lode is unproductive at present. Two stope in the back of this level are worth 8/ per fm. each.

**PHENIX.**—R. Pryor, E. Adams, Feb. 24: The sinking of the engine-shaft below the 60 fm. level is being pushed on with all possible speed; the lode is 6 ft. wide, producing 21 cwt. of lead per fathom. In the 60 fm. level, driving south of shaft, the lode is 2 ft. wide, and producing 5 cwt. of lead per fathom. The lode in the winze sinking below the 60 fm. level, south of shaft, is 18 in. wide, and producing 8 cwt. of lead per fathom, with an exceedingly good appearance. There is no further change throughout the mine requiring comment. Our machinery is working well. Friday next will be our pay and setting day, after which a full report shall be sent to you.

**PLYMOUTH.**—J. Garland, Feb. 25: In the 24, east of the engine shaft, the lode is 2 ft. wide, composed of blende, muddle, and stones of lead ore, but not as sufficient to value; there being a moderately productive lode in the winze below the 12 (now down about 10 fathoms) level, the expectation of an important improvement in this level. In the cross-cut north of the 12, towards the north lode, progress is slow, owing to the hard nature of the ground; I am in hopes of getting through the sandstone shortly, when better progress will be made, and I also expect to intersect the lode daily. In the winze sinking below the 12 fathom level, 20 fathoms east of new shaft, the lode is large, 3 ft. wide, and composed of blende, muddle, and good stones of lead ore, producing of the latter 15 cwt. per fathom; I may here observe that this winze is about 10 fathoms in advance of the present end of the 24 east. In the adit level, east of the cross-cut, having observed a branch of the lode going off south from a stope over this level, I have placed the men to put in a short cross-cut in that direction; possibly this may be the main part of the lode, although the gravel is not so good as that of the 12, and the lode is not so wide, the lode is 1 ft. wide, composed of blende, muddle, and lead ore, yielding of the latter full 1 ton per fathom. The stope throughout the mine (six in number) produce an average of 15 cwt. per fathom. Drawing and dressing are going on as usual, and we hope to sample 40 tons of lead ore some time in the coming week.

**PRINCE OF WALES.**—J. Gifford, F. Phillips, Feb. 24: In the 65 east we have not finished taking down the lode. In the stope in back of this level the lode has improved a little. In the 77 east and 55 east we are driving by the side of the lode. The silver lode is still yielding saving work.

**RESTROGNET.**—J. H. Streeb, Feb. 25: There is not much change in the mine to notice since last week. We have taken the men from driving the deep level, and set them to stope the bottom of No. 2 main level from No. 3 pass 3 ft. 6 in. deeper than it is at present, so as to have more rock in No. 2 end and unwater the level quicker. No. 1 main level driving north continues about the same; the gravel is about the same—about 15 in. thick, of fair quality. The air level driving south from No. 1 pass is not clear of the old workings. In the cross level driving north and south from No. 1 and No. 2 air levels the gravel will average about 4 ft. thick, of fair quality. In the stripping ground east from No. 1 main level the gravel is about 16 in. thick, of fair quality. In the stripping ground between No. 1 and No. 2 main levels the gravel is 3 ft. thick. In the stripping ground west from No. 2 main level the gravel is about 2 ft. 6 in. thick, of fair quality.

**REIDOLF.**—J. Ridge, Feb. 21: The men are making good progress in sinking. The shaft is 16 ft. below the 10; the part of the lode carried yields good branches of lead ore. In the 10 west the lode is 4 to 5 ft. wide, producing strings of lead and blende—the end letting out water.—Rhurgras: There is no change to notice in the character of the lode in deep adit level this week.

**ROMAN GRAVELS.**—Arthur Waters, Feb. 26: In the 95, south of No. 1 winze, there is a wide, very fine-looking lode, and which has improved for lead since last week. The 95, south of winze, is worth 2 tons per fathom. The 50, south of the counter, is now entering the run of ore, and we hope to have a splendid section of ore available. The 72, south of Corfield's, is going forward in a splendid course of ore. The 62, south of No. 2 winze, south of the above shaft, is in a very wide, good grey lode. The other points are the same as for some time past. We have today sold 230 tons of lead, at an average price of 14/ 10s. 3d. per ton.

**ROSEWARNE UNITED.**—E. Hosking, W. Bennetts, Feb. 26: The water is in fork 3 fms. below the 70 fm. level. The shaftmen are now engaged fixing a drawing-lift at this level, which we hope to complete by the end of the week. The lode in the 22, east of Wellington's shaft, is 2 ft. wide, and producing some good copper ore, worth 5/ per fathom.

**SOUTH CARRY BREA.**—Wm. Rich, J. Knottwell, Feb. 25: The lode in the engine shaft, sinking below the 150, is yielding good stones of copper ore. We have just cut into the lode in the 150, east of cross cut; as far as can be seen it has a promising appearance for making copper, and a portion of the lode is yielding good work for tin. Two stope in the back of the 150 are worth 20/ and 30/ per fm. respectively. The copper stope, east of winze, in the bottom of the 130, is worth 15/ per fm. and west of winze 25/ per fm.

**SOUTH MERLWYN.**—R. Rowlands, Feb. 26: Since my last we seem to have improved at both points of operation, and I hope, judging from the appearance of the 120, to be in a good deposit very shortly.

**SOUTH PRINCE PATRICK.**—J. Jones, Feb. 25: In my last report I mentioned the discovery of a vein of carbonate of lead in the chert formation, since then we have sunk some yards in the vein, and it still promises well, as the quality improves by sinking, and I fully expect it will give good profits. I have taken two men from the eastern shaft to join those sinking the shaft in the grey ore, and another two to assist the four driving south on Parry's lode. Before proceeding further it is my pleasant duty to inform you that Mr. Richardson, one of your directors, paid me a visit yesterday, and went down the mine and made a thorough survey of all the works, and I am glad to say he was very much pleased with all he saw. In my last I mentioned an improvement in the south driving in Parry's lode, since then it has greatly improved, and while Mr. Richardson and myself were underground the men made a fresh discovery, the ground became rich with very fine lumps of lead for the entire height and breadth of the drift. We also make good progress in driving the downhill level in the north in this lode, and the vein gets more level. We expect to make a grand discovery daily; the ore above the boulders is same as last reported.

**SOUTH ROMAN GRAVELS.**—J. W. Powning, Feb. 25: Shelfield: In the 80 fm. level, east, driving east of engine-shaft, we have reached the shoot of ore ground driving through the 40 east; the men have blasted a hole in the lode this morning, which is 2 1/2 ft. wide, a splendid mixture of carbonate of lime and lead ore; we expect a still further improvement as we get more into the shoot; this end is 21 fms. from shaft. We are making good progress in driving the 20, west of shaft; the opening, or cavity, continues, in which we find good solid lumps of ore, and out of which there comes a very large stream of water. The end, 5 ft. wide, is all lode, and we have just bored a hole north 4 1/2 ft., but have not reached the footwall; the lode is composed chiefly of carbonate of lime, protoxide of iron, decomposed greenstone, and patches of lead ore, but not enough of the latter to value; this is a fine, strong looking lode, and in my opinion depth is only wanted to make this a great and profitable mine. It must be understood that to go deeper it will be necessary to have a more powerful engine. I have suspended driving the 10 west for the present, and have put the two men from this end, with two others, to cross cut to the lode standing north of this level, and from which large quantities of ore have been got by former workers in the roof of the adit level. We have not yet reached the lode in the deep adit cross-cut, driving towards Roman lode, but are frequently crossing strings and patches of limonite.

**SOUTH TOLCARN.**—J. Vivian and Son, Jas. Paull, Feb. 27: The engine has been completed, the pump-rods connected with it, and the pitwork sent down. We shall start the engine on Saturday next (to-morrow). The cause of the delay in getting the engine to work has been in obtaining of a stream of surface water for feeding the boiler and condensing, which is of great advantage to us, inasmuch as it obviates the expense of purchasing a plunger lift to force the water from the adit to the surface, and the continual cost of working the same. As far as we can ascertain the engine-shaft has been sunk about 15 fms. below the adit, and unless we find it filled with debris we think a fortnight will enable us to see the bottom of it; but in any case we calculate on doing so within a month. We have driven the adit level 4 fms. west of the cross-cut on two branches of lode, which are about 4 fms. south of the South Condurrow tin lode. These branches have varied considerably in size and direction, sometimes being nearly vertical, and at others diverging from each other; at present they are nearly vertical, and we are in hopes that they will form a junction and make one lode of good size, there being only 4 ft. of rock between them. They are both highly mineralized, the north one producing very rich tinstone, with some rich copper ore, and the south one rich black, grey, and yellow copper. Both branches appear to be getting stronger and larger as we get further west, and in going down there are four other strong lodes which will fall into the tin lode before the latter reaches the engine-shaft; and below these points of junction we seem likely to have large and very profitable bodies of ore. It is a very great advantage to have so many lodes within so short a distance as we have in this mine, and the whole of them to be so dipping as to form junctions with the great trunk lode of the district above the 60. The formations of ores which may be calculated on almost with certainty under and about these points of intersection, will, therefore, be reached by an out-croachment, and when laid open will be worked by a low rate of expenditure. The foregoing remarks embody our candid opinion of the mine, and we think, offers such excellent prospects for rendering good profits.

**SOUTH WARD.**—R. Goldworthy, Feb. 25: Yesterday being our pay and setting day, when the following bargains were let:—To sink Thomas's engine-shaft 9 ft., cut trip-plat, put in tramroad, &c., by six men, as per bargain, for 50/. To drive the 72 north, by two men, at 2/ 6s. per fathom; lode 2 ft. wide, composed of dookan, spar, muddle, blende, and occasional stones of lead; a promising lode. The 72 south, by four men, at 2/ 15s. per fathom; lode 1 foot wide, producing saving change to notice in the cross-cut east, by six men, at 4/ 15s. per fathom. No men, at 2/ 10s. per fathom. The ground appears to be more settled, and the lode is again showing a more promising appearance. Two stope, one in the back of the 60 shaft, by eight men, and one in the back of the 25 north, by two men, each sampled on the 21 inst. a parcel of lead ore, computed 15 tons.

**ST. AGNES CONSOLS.**—W. Vivian, Feb. 26: We are pushing on sinking of the engine-shaft below the 60, and driving the cross-cut north at the 60 fm. level to the other parts of the mine since last week. There is no change to notice in the lode; indeed, I expected to have cut into it by this time. I will send you full particulars when we have done so.

**ST. JUST AMALGAMATED.**—R. Pryor, T. Richards, Wm. Bawden, Feb. 24: The sinking of Savel's engine-shaft, below the 120 fm. level, is being rapidly proceeded with; the lode at present is in two parts, which will shortly be together, when we expect an improvement in its value. The lode in the 120 fm. level, driving throughout the mine contains the same as for some time past. Saturday next being our pay and setting day, a full report shall be forwarded.

**SUCCESS, RUSHY CLIFF, AND NANCY CONSOLS.**—Hy. Francis, Feb. 26:

We are progressing very favourably with the sinking of Nancy shaft, and have just met with part of the same vein that we have in the old Roman works; the shaft; we may, therefore, expect to communicate these two points in a short time. In Rushy Cliff adit level appearances are much the same as last reported. We have not got through No. 8 cross vein as yet; it is a large and very promising vein, contains some ore and barites, and will require particular attention at some future time, our main object at present being the speedy extension of this level into higher cover or into the hill westward.

**TAMAR CONSOLS.**—G. Rowe, Feb. 25: We have suspended for the time being our operations on the silver-lead lode, and placed the men to assist the work at the manganese department by clearing up a portion of the old workings, and to facilitate the driving east from the trial shaft, all of which are progressing very satisfactorily, and the ground improving for progress.

**TANKERVILLE.**—Arthur Waters, Feb. 26: The lode in the shaft below the 140 is 7 to 8 ft. wide, and although not near so rich as was the lode at and about the 120, still it shows a very fine appearance, and is, we think, on the eve of a great change for the better. The shaft is 6 fms. below the 140. Other places without change to notice since last reported on. The whole of the plunger lifts will be fixed by setting-day—to-morrow week.

**THE QUEEN (Silver Lead).**—E. Evans, Feb. 25: The ground in the 140 yard level continues hard, and of just the same character as when I last reported. The 120 yard level looks more promising, the joint on the footwall being 18 in. wide, composed of spar and limestone, with a sprinkling of lead in it. The joint in the 80 yard level is again wider, and is yielding more lead than when I last wrote you. The roof of the level is stronger, but I think it will come down as we proceed. There are solid lumps of lead in the roof 6 in. wide and 18 in. long, and smaller lumps mixed with clay from the roof to the bottom. The Cambrian shaft will be required to handle much wider at the bottom, as it is of the cross-cover of the 120 yard level. The 120 yard level, west from the Cambrian shaft, has been driven 44 yards, of which 30 yards has been nearly filled with debris, and must be cleared out, so that we can have room to work at the bottom of the Cambrian shaft, which is 41 yards deep. A level has been driven 32 yard level west, in which a sump has been sunk to the depth of 20 yards; and from this sump a level has been driven west 4 yards, and in this level another sump has been sunk to the depth of about 4 yards, so that the bottom of the second sump is about 24 yards below the bottom of the shaft. I shall, however, send you a plan of these workings in a few days.

**TREGARDOCK.**—J. Spargo, T. Spargo, Feb. 25: No. 1 Pearce's stope, in the roof of No. 2 level, continues to yield good work for the market. In No. 2 stope the lode is 4 ft. wide, and is yielding more lead than when I last reported. We have decided to continue the driving of No. 2 level for another week before we cut into the lode; from what we can at present see the indications are favourable, and we think good rocks of ore will be broken in our next taking down. Our surface operations are being pushed forward as fast as possible with the staff of men employed. Other parts of the mine are without alteration.

**TRELEIGH WOOD.**—E. Hosking, W. Goldworthy, Feb. 25: In driving the 44, west of the cross cut, we have met with a slide that has rather disordered the lode in that direction, and we have, therefore, placed the men to drive east, where the lode is worth 40/ per fathom. The lode in the 44, east of the cross-cut, is yielding stamping work. The lode in the 44, east of the cross-cut, is now down about 3 fms., the lode in this shaft, so far as seen, is 4 ft. wide, but we have not reached the footwall. At this point the lode is looking very kindly for so shallow a depth. We are pushing on all operations as fast as possible to commence to drop below the 40. We have all the necessary pitwork on the mine to fork to the 50.

**TYLLWYD.**—J. Paull, Feb. 19: During the past month the engine-shaft has been sunk 3 fms.; at present there is a branch about 6 in. wide crossing the shaft, carrying some very nice lead ore in small branches, quite solid. I consider this to be a very good indication, and, in all probability, when we cross cut to the two lodes we shall find them equal to our most sanguine expectations. The adit on the north lode has been driven 2 fms. 2 ft. 6 in.; in this drive the lode has varied from 2 ft. 6 in. to 1 ft. 6 in., being about 1 ft. at present, containing spar, clay-stone, and carbonate of lime, but without lead ore at present, being disordered by cross branches of spar, but I expect this to be of short duration. I may mention here that the men from this place have been part of last month, and are now engaged on surface. We are now clearing a level below the old winze mentioned in former reports, in order to get to the end of ground, so that we may drive a level under the said winze. In doing this we are in hopes of laying open some very profitable ore ground. Surface operations are going on well. We have finished the lat on the south side of the river, brought on the water to end of same, and are now erecting the lampers across the river. The contractor is now busily engaged casting the pumps, &c. One of the wire-rope is on the mine, and the other is at Aberystwyth. I think I may say that before another monthly report is written the wheel, pump, lampers, wire-rope, &c., will all be in full operation, providing we get the castings from the foundry, as promised.

**VAN CONSOLS.**—J. Roach, W. T. White, Feb. 26: The 30 fm. level, under adit east of western shaft, is still being driven on the north lode; we find from our dialling that we have 3 fms. more to drive before the junction with the V-n lode will be reached, where we fully expect to meet with a course of lead. The 15, under adit, east of Gundry's shaft, is in a rich lode, yielding 5 tons of lead per fathom; the winze sinking under this level is also producing 4 1/2 to 5 tons of lead per fathom. We do not hesitate to say, judging from the general appearance of the course of the lode, and the nature of the ground, and from which we shall raise large quantities of lead; the highly favourable change that has taken place in the character of the lode and ground fully justifies this opinion, not forgetting the important fact that at about the same depth commenced the great course of ore in the neighbouring mine—the Van-on—the very same lode. Dressing of ore and all other operations going on satisfactorily.

**VAUGHAN.**—Feb. 17: In the 32, east and west, there is no change worthy of remark, and but little has been done since last reported on in consequence of the pumping wheel being idle through hard frost, but we are pleased to say the water again drained, and the men resumed driving. In the deep adit level we have driven into the lode 10 feet and have not yet reached the north wall, being composed of a light clay-slate, carbonate of lime, and quartz, but as yet unproductive for lead—a promising lode in appearance. In the deep adit level east, on south lode at Fronfer, the ground continues easy for progress, being composed of a clay-slate and carbonate of lime, showing occasionally spots of muddle. Our pumping wheel and pitwork are in good working order, with a good supply of water.

**WEST CARADON.**—N. Richards, Feb. 25: The lode in the 42, east of shaft, will produce 1 ton of copper ore per fathom. The lode west of ditto will yield 1 ton per fathom. No. 1 stope in the back of the 55 has improved, and is now worth 3 tons of copper ore per fathom. No. 2 stope will produce 2 tons per fathom. No other change to notice.

**WEST ESKAIR LLE.**—R. Harvey, Feb. 26: There is no particular change in any of our underground operations since my last report, everything going on favourably. The engineers are now engaged erecting the new jiggers, and when they are completed we shall be sending extra ore to market as before advised. We have set the new water-pump, and the men will commence upon it at once.

**WEST GODOLPHIN.**—John Pope, jun., Feb. 25: Counter Lode: Pressure-shaft: The lode in this shaft sinking below the 50 is 3 1/2 ft. wide; a fine-looking lode, worth for the length of the shaft 25/ per fathom. The lode in the 50, driving north-west of the shaft, is 15 in. wide, and is yielding 12/ per fathom. The lode in the stope in the back of this level is 3 1/2 ft. wide, worth 12/ per fathom. The lode in this level driving south-east of Pressure-shaft, is 18 in. wide, worth 6/ per fm. We have not cut Pink lode in this level yet, but I think we should have done so before this had the ground not become harder, which is at present very spare for driving, but we are expecting to cut it every foot we drive. The lode in the stope in the back of this level is 4 ft. wide, worth 14/ per fathom. The lode in the 40, driving north-west of Pressure-shaft, is 18 in. wide, saving work for tin; a kindly lode.

**WEST GWENAP CONSOLS.**—J. N. Newnham, Feb. 26: We have the lode now in the west end, where it is composed of cap, chlorite, &c., and occasionally a little tin, and it is getting more settled; altogether it looks more promising for tin. The water has not recently increased much in the adit.

**WEST TANKERVILLE.**—A. Waters, Feb. 26: The 60 south from Roman Gravel boundary is holed to the 50 north of our boundary shaft, and a good piece of ground opened for stope. The 50, south of shaft, is going forward in a productive lode. There is a good run of ore in front of this end, and which is proved by the 46 for 14 fms. in length. The said 46 is not yet up to the run of the old men's ore ground, but will soon be entering it. The stope are yielding their usual quantities of ore. We are clearing the bottom of the old men's stope below the 40 fm. level, south of old winze, and hope in a few days to commence sinking below the level of the 46, near the shale. We hope the time is not far distant when this part of the mine will be in a good position to get ore. The shaft is down, and we are fairly rid of the old men's workings. Time will show what the mine will do now we have a fair start in whole ground.

**WEST WHEAL GORLAND.**—J. Mayne, Feb. 27: The 50 fm. level, driving west, on the south lode, is worth 12/ per fathom. The rise in the back of the 42 west is worth 8/ per fathom. The stope in the back of the 42 east is worth 10/ per fathom. The 32, driving west, is worth 7/ per fathom. The winze sinking below this level is worth 8/ per fathom; this is being sunk to communicate to the rise in the back of the 42, when this is holed we shall be in a position to have some good tinstuff, and shall commence stope forthwith. The 22, driving east on the north lode, is worth 4/ per fm. Messrs. Our operations during the past week have been confined to principally clearing up the large bottoms in this part of the mine; up to the present time we are down about 7 fathoms at this point, it is being carried to the western of ground, and the work from which we are pleased to inform you rich stones of tin are broken, thus indicating, as soon as the bottoms are reached, we believe, a very good lode will be the result. The machinery throughout the mine is in good order and working well.

**WHEAL ARGUS.**—T. Trahair, Feb. 25: The shaftmen stopeing under the 30, west of Collyer's shaft, on the Elisha lode, are down 8 fathoms under the 30. I

think six weeks will complete the stopeing of this piece of ground as deep as the 30, and then I will. As soon as we reach this point the mine will stand in a different position. The stope worked on tutek last month are all set on tribute. We have set four tribute pitches since Saturday, and have two or three more to set should any men call round to see for work. We hope this change in the mode of working from tutek to tribute will be a great benefit to the working of the mine. **WHEAL COATES.**—W. H. Martin, Feb. 23: The engine-shaft is sunk 10 ft. 4 in. below the 20 fm. level; the ground is full of joints, which make it very spare for sinking. We cut ground and put in pouncehouse and skip-rod at the 20 fm. level. Next week we purpose to fix bearer and eistern and 8 in. drawing lift from the 20 to the 10. The 20 west is driven from No. 2 winze 6 fms. 5 ft. 8 in. in the north part of the lode; worth for tin on average, 10/ per fathom. We communicated No. 2 winze with ladder winze; distance between winzes 12 fms.; lode worth for tin length from 10/ to 12/ per fathom. The men that were driving west from ladder winze are preparing to drive east from the ladder winze. The pair of men that were driving east from No. 2 winze are stopeing the bottom of the level where we holed; this communication has effected a good ventilation throughout the mine. Next week we shall enlarge the bottom of No. 2 winze, preparatory to sinking below the 20 fm. level. The latter part of this week we shall complete the erection of the centre head boulders and set them to work. The masons have not been here the last few days about the burning-house; they have another job to complete before the contractor can bring his full party to work for us.

**WHEAL CREBOR.**—J. Goldworthy, Feb. 25: In the 120, east of Cook's shaft, the driving is by the side of the lode; the wall and stratum give favourable appearances for the production of copper ore. In the stope in the back the lode continues of its former size and value, worth from 35/ to 40/ per fathom. In the 108 the lode is taken down in the end, it is 5 ft. wide, and produces 4 tons of copper ore per fathom, with a good appearance. There is no particular change in the 98 cwt. south. The joints in the stratum contain a little more lead ore than usual. We look on this as a favourable indication of a branch or lode being near. In the 72 east there is no change to notice. In the 48 east no lode has been taken down, nor in the rise in back of the 38. In the tribute pitches in back of the 48 the lode is opening up satisfactorily. The machinery throughout the mine is working well.

**WHEAL GRENVILLE.**—E. Hosking, W. Bennetts, Feb. 21: The shaftmen will commence sinking below the 150 in the early part of next week. The rise above the 150, on South Condurrow lode, is worth 30/ per fathom. The lode in the 140, east of cross-cut, is worth 25/ per fathom. The lode in the north shaft sinking below the 120 is 2 ft. wide, producing saving work. The lode in the 120, east of north shaft, is 2 ft. wide, and worth 12/ per fathom. The stope above the 120 east is worth 15/ per fathom. The lode in the 110 east is 20 in. wide, and worth 8/ per fathom. The stope below the 110 east is worth 15/ per fathom. The lode in the 100, east of north shaft, is 2 ft. wide, and worth 8/ per fathom.

**WHEAL KITTY (St. Agnes).**—S. Davy, J. Williams, Feb. 21: New Shaft—Pryor's Lode: The lode in the 142, driving west of shaft, is 2 ft. wide, producing good work for tin. In the 142, driving east of shaft, the lode is 2 1/2 ft. wide, and presenting a favourable appearance. The lode in the 130, driving east of shaft, is worth for tin 7/ per fathom. The lode in the 130, driving west of shaft, is worth for tin 10/ per fathom. The lode in the 118, driving east of shaft, is worth for tin 7/ per fathom. In the 118, driving west of shaft, the lode is worth for tin 11/ per fathom. The lode in the 106, driving west of shaft, is worth for tin 16/ per fathom. The lode in the 20, driving east of shaft, is producing a little tin, but not sufficient to value. We have no change to report in the north adit level driving west of eastern boundary.

**WHEAL MARY.**—T. Parkyn, Feb. 26: I have the north lode further west, and find it contains tin equally as good as on the point we opened it first. I want to erect a horse-wheel at this west point, with an incline tramroad and transit direct to the shaft.

**WHEAL MARY HUTCHINGS.**—Henry Minors, Feb. 25: We have cleared the 27, on the new south lode, west of rise, and men are engaged in stopeing the back of the level. The lode is about 20 in. wide, worth 6/ per fathom. There is no doubt, from the present appearance of the lode, that as we lay it open good results will be met with. All the other points in the mine are looking much the same as last reported, still of a very favourable character.

**WHEAL UNY.**—William Rich, M. Rogers, S. Coade, jun., Feb. 21: The lode in the 160 east, east and west of engine-shaft, are each worth 5/ per fathom. The rise in the back of the 150 east carries stones of tin. The lode in the 140, east of Gooding's shaft, is worth 7/ per fathom. The lode in the 140, west of incline shaft, is worth 12/ per fathom. The rise in the back of the 120, west of incline shaft, is worth 10/ per fathom. The lode in the 130, east of King's, is worth 8/ per fathom. The rise in the back of the 130 towards Hind's perpendicular shaft is being urged on by six men, but the ground is hard and the progress slow. The lode in the 120, east of King's, is worth 6/ per fathom. The lode in the 110 east is worth 15/ per fathom. The lode in the 100 east carries stones of tin. The lode in the 80 east is worth 7/ per fathom. The lode in the 60 east is worth 5/ per fathom. The lode in the 50 east is worth 5/ per fathom. The ground is stiffer in the 30 cross-cut north towards Davis lode.

**WHEAL RUBY.**—J. Richards, Feb. 25: In cutting into the lode south in the adit level driving west, we found it much smaller than usual, but it is again opening out as we proceed, and contains a little tin in the south part; I think it will soon be found its usual size, and that it will considerably improve for tin, it has every appearance of it at present, and I shall not be surprised to strike into a good discovery of tin at any day. I hope next week to be able to report that the lode has so improved so as to state its producing value.

#### ASSHETON, TAN-Y-BWLCH AND PANTGWYN MINES.

At the extreme end of Carnarvonshire, sloping towards St. Tudwell's roads, in Cardiganshire Bay, directly opposite to the Monmouthshire hills stand these mines:—

**ASSHETON.**—This mine is being worked by a London company, and has prospects second to none in North Wales, though only in its infancy, the deepest level being 40 under adit. Here they have driven some 25 fathoms west of main shaft, and have only a short distance to reach the commencement of the bunch of lead gone down in bottom of the 30. The 30 fm. level has been driven through a course of ore, in all some 600 fathoms long, worth from 20/ to 60/ per fathom, and possessing appearances that the lode will be in a mass of lead. In a short period this will be proved, and turning out as anticipated, and Assheton Mine will then immediately rank with our foremost dividend mines. West of the 30 fathom breast are some 260 fathoms of virgin ground, on the line of the vein up to the boundary of Tan-y-bwlch, and this is of itself, for mining purposes, worth a very large sum of money, and will be energetically developed in the coming spring. Brown's shaft is now being sunk below the 70, and will come down in the very heart of the bunch of lead. This will be accomplished in about four months, when nothing apparently will prevent this mine from doubling its returns. They get now 25 tons of lead, and about the same quantity of blende monthly. This leaves a small profit besides paying for a good deal of dead work. Immediately to the west is the—

**TAN-Y-BWLCH MINE.** worked by a gentleman named Campbell, which is in itself a perfect wonder. That mine is sunk to the 60, which is 20 fms. deeper than Assheton. There is no other such lode opening up in Wales. They have gone through a course of lead, varying in value from 40/ to 100/ for an immense distance, and it seems almost a certainty that it will continue all the way through the grant, which is nearly 1/2 mile in length. Mr. Campbell is selling about 50 tons of lead monthly, which is from exploration only. This gentleman had spent about 11,000/ before discovering the mine; but I feel certain he would not now take 100,000/ for it. Still further west is—

**PANTGWYN MINE.**—Little has been done here as yet; but Campbell's vein goes through it for 300 fathoms in length, which is a splendid piece of virgin ground.—*North Wales Chronicle.*

**CORNISH MINE SHARE MARKET.**—Tin having gone down 6/ again this week, the prices of shares in the Cornish Mine Share Market have (with the exception of East Lovell) sustained a serious drop all round, the holders of shares, being panic-stricken, are rushing into the market, but in the absence of buyers little business has been done—in fact, to quote the words of the dealers, "bidders have been a regular drag on the market, and buyers have been in strong demand." The state of mining at the present time seems exceedingly dull, with a few bright spots to relieve the monotony of the scene. It is slightly encouraging to find that there will be a reduction in the price of coals in the early part of March, which also means a corresponding drop in iron. It is also evident that labour will be cheaper soon, and there seems every probability now of a re-introduction of the 12-monthly pay system, which would of course be another good help to mining adventurers, although we still believe that men do not receive too much money, but we want more work done. It is, however, certain that they cannot be independent as they were 18 months or two years since. Nothing but the strictest economy will enable even some of our best mines to tide over the present depressed time. Never was more needed, and unless practised everywhere the results will probably be most disastrous. With the present price of tin, it is next to impossible for any mine to pay, and the most economical managers, therefore, must necessarily be looked up to as the best at present, irrespective of mining abilities which they may possess. We regret to hear that at North Roskear meeting, held on Tuesday, it was resolved to offer the machinery to the lords, a step preliminary to its being offered as a going concern. It is rumoured that South Roskear Company, with a view of protecting their own mine from the water, which would flow into it, contemplate buying North Roskear, "stock and block." If they take such a step at the present time they are certainly plucky, and deserve great praise, but it would almost seem too good to be true. If North Roskear is not thus bought, it would seem that the idea expressed at West Seton meeting some time since (although then ridiculed, as might be expected) to the effect that the whole of that district would soon go down, seems almost likely to be realised, for it is said that North Crofty, not far off, is on its last legs, that Wheal Seton has almost reached its death, and that West Seton, not being able to keep the accumulated water, must succumb to the same fate. We sincerely trust that this will not be the case, but that a turn will soon take place in the price of tin, which would immediately put mining generally on a much better footing. The following are the closing prices, which in many cases may be deemed almost nominal:—Carn Brea has declined to 34, 36, but little business has been done. Cook's Kitchens are as low as 5 to 7. Dolcoath has dropped to 37, 39. East Pool, 5 to 6. East Lovell is about the only share in demand; the price remains firm, and they close 10 1/2 buyers. Providence closed 7 to 8. Rosewall Hills dropped to 55, 10s. 6d. We are glad to hear that the men have resumed work under the system of only 12 days in the year. South Carn Brea, 2 to 3 1/2. South Condurrow, 2 to 3 1/2. The meeting was held on Thursday, when no call was made. South Croftys easier at 17 to 19. South Frances down to 8, 10. St. Ives Consols, nominally, 5 to 6. Tincoffs are to be had as low as 30 to 32. West Bassett declined to 6 1/2, 7. West Chiverton, 5 to 5 1/2. West Frances remain about same as last quoted, 8 to 9. West Seton, 12 to 14. West Tolgus, 21 to 23; it is said that in the 125 fm. level they have had one of the best discoveries of copper ore seen in Cornwall for many years past; this has tended to make shares firmer. Wheal Kitty (St. Agnes) declined to 7 1/2, 8 1/2. Wheal Seton, 10 to 12. Wheal Uny, 2 to 2 1/2.—*West Briton.*

**ST. AGNES CONSOLS.**—This mine affords more than a gleam of light in the general gloom. It is not only holding out remarkable prospects, but the works are being pushed on with the greatest vigour. The rich deposits of tin known to be dropping into it will be reached in a comparatively short time, when it is fully expected, even with the present depressed price of tin, that this will be one of the most remunerative properties in Cornwall.



Glasgow Caradon; at the meeting here the accounts for 12 months show a profit of 450%, out of which two dividends were declared to September amounting to 170%, leaving a balance now payable of 280% the returns for the year were 8000 tons of gas ore, realising 14,158%. At Wheel Unity Wood a call of 2s. 6d.



per share was made. The costs for three months were 2534. West Bassett, 6 to 7; West Tankerville, 1½ to 2½; Wheel Kitty (St. Agnes), 7 to 8; Wheel Uny, 2 to 2½; New Wheel Lovell; at the meeting a call of 13s. 4d. per share was made. The accounts, charging up costs to Jan. 2, showed a debit balance of 1220. 2s. 5d., and 1387 shares were relinquished. The tin sold in three months realised 460. 12s., and the agent hopes for the future to reduce the cost to a little under 300. per month. Glan Ssvern, 1 to 1½; Thornhill Reef, 1½ to 2.

Very little business is doing in Foreign Mines. Chontales are quoted 15s. to 17s. 6d.; Emma, 2½ to 3; Flagstaff, 2½ to 3; Last Chance, 17s. 6d. to 20s.; Tecoma, 17s. 6d. to 20s.; Scottish Australian, 1½ to 2; Sweetland Creek, 4½ to 4¾.

The market for Mine Shares on the Stock Exchange during the week has not manifested much change. The principal home mine shares have been dealt in to a fair extent. American descriptions have not shown much animation, except Emma shares, which have again fluctuated considerably. Hydraulic mine shares have been in request at quotations.

The Metal Market has been dull, and prices have further declined. The contraction of the trade of the country continues to cause depression. Copper has fallen, but some activity was observable on the lower prices. Tin has been flatter, especially Straits; tin-plates somewhat easier. Lead easier, with but little business doing. Spelter declined.

Richmond Consolidated, 5½ to 6. Cable received:—"Five days run, 15,000, one furnace short of charcoal." The policy adopted this winter by the company of mainly trusting to contractors to keep up the supply of charcoal has been successful up to this week, and as the winter is now so nearly over the probable suspension of a few days, should the roads still continue bad, is of little moment. Last year the company did not begin smelting till the latter end of March. If the railway from Eureka to Palisade Station is completed by the autumn the question of continuous smelting will be favourably settled. It has been frequently pointed out that the Richmond ores do not contain sufficient lead to flux the gold and silver, much of which is consequently lost in the slags. It appears from the Eureka Sentinel that the Richmond Company have obtained a bond on the Diabole Mine, which had a good show of lead ore, and that the explorations since made have discovered "a fine body of ore." The necessity of a proper admixture of ores to produce successful smelting is well known to all engaged in such operations. The Richmond Mine contains within itself a considerable variety of ores, which when duly selected and mixed yield very good results, but this advantage cannot be fully secured till the reserves are in proper form to admit of the selection; so long as the furnaces were supplied chiefly from the drifts and adits but little choice was possible, and during the winter outside ores are not procurable in sufficient quantity. The present winter at Eureka appears to be a mild one in comparison with that of last year. It appears that it is the softness of the roads which at present prevent traffic. New Pacific, 3 to 1; the agent reports that he has set some work on tribute, and is raising a small quantity of ore of inferior value.

Emma shares have been largely dealt in, and close 2½ to 3; private advices continue of a satisfactory character. About the same date that the official circular stated that the new discovery was "pinching out" a correspondent, writing from Salt Lake City, says:—"One thing I learned to-day of the new strike, and it is this:—that the body of ore from the granite to the other wall is 17 ft. wide, and they have drifted 100 ft. on it; if this is giving out, let us hope it will continue to give it." Another correspondent, under date Salt Lake City, Feb. 9, writes:—

"I have your of the 12th, and note what you say of certain parties in London denying the truth of what I have written. I send you assays of the round lots of 50 tons of ore as sold, to fully show the value and character of the ore. The Emma Mine is all I have represented to you, and I wish I were in London to add strength to the reports in person. I have no hesitancy in saying whoever denies the truth of what I have written about the Emma falsify in their hearts, in their souls, and understandings. Of this 'big' strike you must have all the particulars are this, and will continue to send you the assays, so that you and the public may know the value thereof."

"I wrote you on the 2nd, sending you memorandum of assay of 50 odd tons of 'M' Emma ore. There is now being sampled 50 tons more of the same kind as the lot of 'S' ore. When these assays are completed I will send you a memorandum to prove to you what such flatterers are. One thing I learned to-day of the new strike is this:—that the body of ore from the granite to the other wall is 17 ft. wide, and they have drifted 100 ft. on it. It is giving out let us pray for such giving. As to the Emma, I can only say that I confirm every word and line I have written. The assays I have sent and may send represent the ore, and when anyone says the information I have given you, or may give you, is false, or deviates from the truth, you are not out of the way when you say they falsify. In all my correspondence in life I never tried to keep more within the bounds of truth and consistency than I have with you. If any change, *pro or contra* takes place in the mine I will advise you promptly. Until then rely and believe what I have said of the mine. Memorandum of assay ore: 'M' lot 82; 250 sacks sampled, being one-half of the lot, weighing 167,454 lbs.; moisture, 15 per cent.; lead, 46 per cent.; silver, 233.50 ozs.; = 809.35.

To this may be added the statement of the former superintendent of the mine, an I am most competent man, that "You may rely on one fact, and that is the Emma is now better by 100 per cent. than it ever was before; the late developments and continued explorations to the deep warrant me in saying this." Utah, 1½ to 1¾; in another column we publish a circular issued by the directors this week. Mr. Longmaid announces that he has surmounted the difficulties of getting the ore to England by making an arrangement with an eminent firm of brokers at San Francisco, and he estimates that the ore when sold here will leave a large margin for profit. Should he be able to carry out his proposal, the company will soon reap the benefit of the outlay on account of dressing machinery.

Flagstaff, 2½ to 3; it will be seen by the report of the adjourned meeting (which appears elsewhere) that a new board of directors were elected, composed of gentlemen of standing and known business capacity, who will, no doubt, find that the arrangements made with Mr. Erwin Davis in regard to the working of this and also Last Chance and Tecoma Mines, cannot but result advantageously to the respective proprietors, and they are to be congratulated upon having their affairs under the control of such management. Attention should be directed to the letter Mr. Davis has addressed to the company, which was read at the meeting. If ever any doubt existed as to the good faith of this gentleman, this letter must completely remove such misgivings, and at the same time clearly demonstrate that, whatever may be said to the contrary, the best interests of the enterprise cannot possibly be better promoted than by carrying out the arrangement in question. Last Chance, 1 to 1½; the tunnel is progressing with all possible dispatch, and will, it is expected, intersect the vein 300 ft. below the present workings about June. Tecoma, 3 to 1; some very good ore continues to be extracted, and the general prospects of the mines are reported as progressively improving. The adjourned meeting is to be held on Tuesday.

The shares in the Gold Washing Companies are still in request. Advices, dated the end of January, state that the season was fairly opened, having been delayed longer than usual by the heavy snows. This explains the latter date of the cleans-up this year. The season was, however, expected to last longer, and an abundant supply of water was anticipated. Sweetland Creek, 4½ to 5; in another column we print the annual report from Mr. McLean, giving the result of the workings for the past year. The *resumé* is well worthy of perusal, and particular attention should be given to the concluding remarks, which indicates that from recent surveys the rich channel of ground will last at least double the time anticipated. Mr. McLean reckons on an uninterrupted supply of water now. The shareholders may, therefore, look for continuous dividends and steady prosperity for some years. A telegram received from Mr. McLean yesterday morning states that after a run of 52 days he has cleaned-up, obtaining 825,000 in gold, leaving a net profit of 814,000. This is considered a very satisfactory result for the first run of the season. Birdseye Creek, 3 to 3½; the superintendent writes under date of Feb. 6:—"I sent yesterday to the Mint 400 ozs. gold (about 88000), from the Neece and West claim, the result of 20 ten-hour days' run, from ground which has been wholly drifted and tilted by its former owners." This result is an extraordinary one, and is an earnest of what may be expected when the drifted ground is passed through. Cedar Creek, 2 to 2½; upon enquiry at the office it is stated that the directors expect to bear of a clean-up in about a week or 10 days, as the superintendent could not get thoroughly to work before

the last few days of January. Blue Tent, 5 to 5½; in another column will be found a report from the superintendent, under date Feb. 6. During January he had been busily engaged working off the old bank at the Enterprise claim, and having done this he had a day or two previously to writing started washing with 1500 in. of water on the richer portion of the gravel in that claim. The work at all parts was progressing in a most satisfactory manner, and the new flumes, &c., were found to work most admirably. Holcombe Valley, 1 to 1½; a correspondent gives a capital account of this company, and predicts a prosperous future so soon as the weather permits the agent to start the mill, now ready for work.

There has been a fair amount of business done in Columbia mining shares. Malpasso, 1 to 1½; advices to hand to-day—an abstract of which will be found in another column—announce a clean-up of 81220 (25000), after a run of 520 hours. As this has been derived from nearly all waste, it is very satisfactory. The works are now within 550 ft. of the rich gravel. At the meeting of shareholders—an account of which will be found in another column—held on Tuesday last, the resolution creating 10,000 10 per cent. preference shares was unanimously adopted. It is expected that the shares will be fully applied for by the present shareholders in the company as on the occasion, some little time back, of an emission of 2000 ordinary shares, upwards of 8000 were applied for. Rica, 3 to 3½; the gravel at this mine is still very rich, and as a good deal of rain had fallen a good clean up may be looked for. Malabar, 3 to 3½; the superintendent expects to commence washing at this mine at the end of March. Tolima, 3½ to 4½; the present advices announce a profit of 87736 for the month at this mine. The superintendent states that the mine never looked so well as at present, and the reserves of ore were steadily increasing.

Western Andes, 3½ to 4½; the profit at this mine for December is 21217, and the advices to hand are very satisfactory.

Van, 30 to 35; the water having partially subsided work has been again commenced on the lode at the 75, and the end looks well for lead, where the lode is cut through the cross, and is extended east and west on its course. Pennerley, 1½ to 2; there is no change here. The various points of operation continue much as last reported. The sale this week was 75 tons of lead, realising 1014. 17s. 6d. Bog, 3 to 3½; the lode in the engine-shaft is still good. In the eastern part of the mine the explorations are presenting a satisfactory appearance. The company have sold this week 50 tons of blende and 40 tons of lead, realising 780. 10s.

Subjoined are the closing quotations:—Bog, 3 to 3½; Carn Brea, 32½ to 37½; Devon Great Consols, 1 to 1½ prem.; East Van, 1 to 1½; East Lovell, 10 to 10½; East Canadian, 1 to 1½; Great Wheel, 3 to 3½; Great Lacey, 11½ to 12; Kingston Down, 3 to 3½; Marke Valley, 3 to 3½; Pennerley, 1½ to 2; Perkins Beach, 3 to 3½; Juncroft, 25 to 30; Tankerville, 8½ to 9½; Van, 30 to 35; Van Consols, 3½ to 3¾; West Tankerville, 1½ to 2½; West Chiverton, 5 to 5½; Almada, 5½ to 6½; Birdseye, 3½ to 3¾; Cedar Creek, 2 to 2½; Cape Copper, 27½ to 28½; Colorado Terrible, 3½ to 3¾; Chontales, 3½ to 3¾; Don Pedro, 3½ to 3¾ dis.; Eberhardt and Aurora, 3½ to 4; Emma, 2½ to 3; Flagstaff, 2½ to 3; Frontino, 3 to 3½; Last Chance, 1 to 1½; Malpasso, 3 to 3½; New Quebrada, 4 to 4½; New Pacific, 3 to 3½; Richmond, 5½ to 6; Sweetland Creek, 4½ to 5; San Pedro, 1½ to 2; Sierra Buttes, 2 to 2½; St. John del Rey, 192½ to 197½; Tecoma, 3 to 3½; Utah, 1½ to 1¾; Rica, 3 to 3½; Blue Tent, 5 to 5½; West Esgril Lie, 2½ to 3½; Holcombe Valley, 1 to 1½.

COLLIERIES.—There has been a fair amount of activity in shares during the week, in marked contrast to the depression in Cornish mining. It being now generally believed that some time will elapse before a recovery takes place in Cornwall, the public are selling out, and investing in sound colliery shares, at once more profitable and less fluctuating. The following shares have been mostly in demand during the week:—Mwyndy Iron Ore, Rhymney, United Bituminous, Ifon Rhyh, Nant-y-Glo, Blaia, Ebbw Vale, Bolekow, and Vaughan, Cardiff and Swansea, Welsh Freehold, Monkland, Dunraven Adare, Marbella. New Sharlston, Wedgwood, and one or two others. At the Rhymney meeting, on Thursday, for the half-year a dividend of 2½ per share on the 500 shares and 12s. 3d. on the 15½ shares was declared, free of income tax, payable on March 12. Newport Abercrom, 2½ to 3; since the last report issued by the directors good progress has been made with the shaft sinking, and the ground being more congenial the first seam of coal is being rapidly approached. The shares are well worth buying. Cardiff and Swansea, at 3½ to 4½, have been pretty freely dealt in. West Swansea—unmarketable. Englefield Colliery, 1 dis. to par; the directors announce that the new engine and machinery for hauling up the main level have now been at work for some weeks, and given great satisfaction. Had, however, the engine been delivered earlier greater progress would have been made at the works. The shares are dealt in on the Stock Exchange. Nant-y-Glo and Blaia, 52½ to 57½; Welsh Freehold, 4 to 5; Monkland, 8½ to 8¾; Marbella, 4½ to 4¾; Ifon Rhyh, 3½ to 4; Bolekow and Vaughan, 30 to 31; Chatterley Iron, 5 to 6; Bowling Iron, 75 to 80; Fitzroy Bossemer, par to 1 prem.; Brynecy Caddy, 1½ to 2; West Mostyn, 1½ to 2; Dunraven Adare, 8½ to 9. The general meeting of the Horbury Junction Iron Company was held on Thursday, at the offices at Wakefield, when the report was adopted, and the directors re-elected. Operations have but just commenced, and they do not anticipate being in full work before June. It was stated that they had six weeks' orders on their books. New Sharlston, 12 to 14; Littleland, 5 to 6; Cleve Hill Colliery, 15s. to 17s. 6d.; Chapel House, 5 to 5½; Mwyndy Iron Ore, 1½ to 1 dis.; United Bituminous Collieries, 1 to 1½. At the Cornwall Minerals Railway meeting, it was stated that early in April the line would be open for mineral traffic, and that the Consolidated and other iron mines had large accumulations of ore waiting to be carried. Were it not for the activity in the iron and china-clay industries of Cornwall the prospect for the county would indeed be most dreary.

THE ATLANTIC AND GREAT WESTERN RAILROAD COMPANY are inviting subscriptions at 85¢ per 100¢ bond for 480,000. STERLING SEVEN PER CENT. WESTERN EXTENSION TRUST BONDS, with guarantee of interest by the Erie Railway Company, and further secured by deposit of shares of the Cleveland, Columbus, Cincinnati, and Indianapolis Railroad Company. The bonds are redeemable at 100¢ sterling on Feb. 1, 1904, and the proceeds will be applied to acquire the further number of 24,000 shares of \$100 each of the last-named company. The bonds, considering the price of issue, will yield over 8 per cent. per annum as an investment, in addition to 1½ per cent. per annum on redemption. As to the position and stability of the guaranteed lines, it is mentioned that the Atlantic and Great Western Railroad Company by its control of the Cleveland, Columbus, Cincinnati, and Indianapolis Railroad will command new sources of traffic and connection with the chief western cities of vast importance to the Atlantic and Great Western and Erie Railway systems. The Erie Railway Company's official report shows, after payment of interest and expenses, that there remained a clear net income for the financial year ending Sept. 30, 1873, equal to 387,665. sterling, available for distribution as dividends to the shareholders, and the guarantee of interest on the bonds now offered for subscription, in the improbable event of its being required to be acted upon, would have to be provided for by the Erie Company; and as the total amount of interest required on these bonds only amounts to 33,400, it will be seen that an enormous margin of security exists for the subscribers to the present issue. In addition to these guarantees, 24,000 shares of \$100 each of the Cleveland, Columbus, Cincinnati, and Indianapolis Railroad Company will be deposited in the names of trustees as a special security for the due and punctual payment of the principal and interest of the bonds now for subscription, and the annual income from these shares (irrespective altogether of the Atlantic and Great Western Railroad Company and the Erie Railway Company's guarantees) will be available to meet the interest payable on the bonds now for subscription. The Cleveland, Columbus, Cincinnati, and Indianapolis Railroad Company has been in operation upwards of 22 years, and has always earned and paid large dividends, the line being in a highly prosperous condition, the dividends paid on its shares during the last seven years varying from 7 to 9 per cent. The shares are quoted at 1 to 1½ prem. The prospectus will be found in another column.

THE NEW SOUTH WALES COLLIERIES COMPANY, with a capital of 200,000, in shares of 20¢ each, has been formed to purchase, for the sum of 141,000, (of which 50,000 will be taken in fully paid-up shares, and the remainder in cash) valuable coal fields, 2963 acres in extent, at Lake Macquarie, 16 miles from Newcastle, and 48 miles from Sydney. New South Wales, reported by Mr. John Mackenzie, F.G.S., the Government Examiner of Coal Fields, to contain 47,502,000 tons of co. 1, and 15,834,000 tons of slack. The purchase has been made subject to two existing contracts for the conditional purchase within a limited period of two portions of the estate, comprising respectively 969 acres and 955 acres, for the respective sums of 48,000, and 47,500, which sums, on the completion of such purchase, will be payable to the company, and upon such payments the original cost of the property will be thereby reduced to 45,250. In addition to this the company will receive a way-leave of not less than 41. per ton upon all coal that may be carried over the company's line of railway from collieries established upon the portions so purchased. The prospectus further states that there are three workable seams of coal under the property acquired. The upper seam, which is about 4 ft. 6 in. in thickness, is a splint coal, well adapted for steam and smelting purposes, lies above

the sea level, and is workable (without shafts) by adits. The next seam, which is about 14 ft. thick, is a bituminous and splint coal, suitable for steam, smelting, gas, and domestic purposes; this is partly above the sea level. The lowest seam, which is estimated to average from 9 to 12 ft. thick, is the celebrated Walsend seam, and is a bituminous coal, suitable for steam, smelting, and eminently for gas and household purposes. This seam is very profitably worked at Newcastle, at a depth of about 140 yards. The southern outcrop of the seam (No. 5) is within a quarter of a mile south of the company's boundary, where it is now being worked on the surface, and it is calculated that it will be worked at a depth of 75 ft. below the surface on the company's property. The present price of coal at the pit's mouth of several collieries in New South Wales is 14s. per ton, whilst the cost of getting in this case may be expected not to exceed 6s. per ton. Assuming a profit of 8s. per ton to be thus realised, it is estimated, on the moderate output of 500 tons a day for 270 working days only, to yield about 54,000. per annum, or 27 per cent. on the capital of the company. This estimate is made with respect only to the portion of the property proposed to be retained and worked by the company. The freight to Melbourne is stated to be about 15s. per ton, and the selling price there ranges from 35s. to 45s. per ton. The collieries at present at work are said to be unequal to the demand, although the exports last year amounted to over 1,000,000 tons. The prospectus will be found in another column.

The shares of Whitley Partners (Limited) are ¼ to ¾ prem. The debenture bonds of the Honduras Railway Conversion Company are par to ½ prem. The preference shares of the Wayne's Merthyr Steam Coal and Ironworks are ½ to 1 prem. The sterling debentures of the Levis (Quebec) and Kennebec Railway Company are 1 to 1½ prem.

It is announced that the Lists of Application for the issue of 500,000. Six per cent. Preference "B" shares of 20¢ each of the Railway Share Trust Company (Limited) will be closed on Monday, March 2, for London, and on Tuesday, March 3, for the country.

## ORES, &amp;c.

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Mr. JOHN HENRY POOLE,

MINERAL AGENT,

LIMPIAS, PROV. SANTANDER, SPAIN.

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CONSULTING ENGINEER,

EXAMINER OF MINES, MINING EXPERT, AND UNITED STATES' DEPUTY MINERAL SURVEYOR.

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## THE COAL MINES REGULATION ACT, 1872.

EXAMINATIONS FOR MANAGERS' CERTIFICATES OF COMPETENCY.

NOTICE IS HEREBY GIVEN, that the undermentioned persons have been appointed to act as SECRETARIES to the several Boards of Examination, for the purpose of the grant of Managers' Certificates of Competency under the above Act.

In the examinations regard is had to such knowledge as is necessary for the practical working of mines in the different districts of the United Kingdom. Applicants desirous of being examined should, therefore, apply for all necessary information to the Secretary of that District in which they desire to serve as managers.

Home Office, 26th February, 1874.

| Mining District and Name of the Government Inspector.  | Name and Address of the Secretary to the Board of Examiners.                     |
|--|--|
| Scotland—Western Division.<br>(W. ALEXANDER, Esq.)   | C. MACPHERSON, Esq.,<br>116, St. Vincent-street, Glasgow.                        |
| South Staffordshire and Worcestershire.<br>(JAMES P. BAKER, Esq.)                            | W. BLAKEMORE, Esq.,<br>Heath Town, Wolverhampton.                                |
| Monmouth, Gloucester, Somerset, and Devon.<br>(LIONEL BROUGH, Esq.)                          | J. T. THOMAS, Esq.,<br>(Care of J. B. Baker, Esq.),<br>Albion-chambers, Bristol. |
| North and East Lancashire.<br>(JOSEPH DICKINSON, Esq.)                                       | M. W. PEACE, Esq.,<br>19, King street, Wigan.                                    |
| West Lancashire—the Wigan and St. Helen's Districts, and North Wales.<br>(THOMAS BELL, Esq.) | M. W. PEACE, Esq.,<br>19, King street, Wigan.                                    |
| Derby, Notts, Warwick, and Leicester.<br>(THOMAS EVANS, Esq.)                                | WM. SAUNDERS, Esq.,<br>42, Full-street, Derby.                                   |
| Scotland—Eastern Division.<br>(RALPH MOORE, Esq.)  | ROBERT CALDER, Esq.,<br>295, Renfrew street, Glasgow, N.B.                       |
| Northumberland, Cumberland, and Durham, north of the Wear.<br>(GEO. WM. SOUTHERN, Esq.)      | T. D. FORREST, Esq.,<br>17, Rock street, Shieldfield,<br>Newcastle-on-Tyne.      |
| South Wales.<br>(THOMAS WALKES, Esq.)  | C. H. JAMES, Esq.,<br>8, Courtland-terrace, Merthyr Tydfil.                      |
| West Riding of Yorkshire.<br>(FRANK A. WARDELL, Esq.)  | JOHN R. JEFFERY, Esq., Solicitor,<br>Bradford, Yorkshire.                        |
| South Durham, Westmoreland, Cumberland, Whitby, and Cleveland.<br>(JAMES WILLIS, Esq.)       | G. W. BARTLETT, Esq.,<br>Cleveland Parade, Darlington.                           |
| North Staffordshire, Shropshire, and Cheshire.<br>(THOMAS WYNN, Esq.)                        | JOSEPH KNIGHT, Esq.,<br>Newcastle-under-Lyne,<br>Staffordshire.                  |
| Ireland.<br>(J. DICKINSON, Esq.)   | M. W. PEACE, Esq.,<br>19, King street, Wigan.                                    |

## TO INVENTORS AND PATENTEES OF COAL CUTTING MACHINERY.

THE SOUTH STAFFORDSHIRE AND EAST WORCESTERSHIRE INSTITUTE OF MINING ENGINEERS OFFER A PREMIUM OF TWENTY GUINEAS for a COAL-CUTTING MACHINE, to be worked by hand, and adapted to the South Staffordshire Thick, or Ten Yard Seam. For further particulars, apply to the Secretary,—  
Mr. HEARY JOHN ON, Jun., Dudley.

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### Notices to Correspondents.

\* \* Much inconvenience having arisen in consequence of several of the Numbers during the past year being out of print, we recommend that the Journal should be filed on receipt; it then forms an accumulating useful work of reference.

81st.—Will any correspondent favour me with the following information?—1. Are there any laboratories open for the practice of analytical chemistry in the evenings in London?—If so, please give address.—2. What book on the assaying of ores would they recommend as being the most comprehensive?—J. C.

RICHMOND MINING COMPANY.—We notice the following errata in Mr. Elliott's letter, in last week's Journal:—For "as it is only Mr. Emersley," read "and it is," &c. For "mixed on each side," read "pressed on each," &c. For "12,000 tons in sight," read "120,000 tons in sight." For "below hanging and footwalls," read "between hanging," &c. For "86 in silver and gold," read "68 in silver and gold."

\* \* A pressure on our space has compelled us to postpone the publication of several articles and other matters intended for this week's Journal—among them Dr. Percy's Lecture on Metals at the Royal School of Mines; the letters of Captain Knapp, and other correspondents.

Received.—"Vigilans" (Tankerville)—"R. H."—"J. R. C."—"W. S. B."—"W. C." (New York)—"An Original Shareholder" (Bensberg)—"W. L."—"A London Shareholder" (Old Batholomew)—"C. O." (Valparaiso)—"E. B." (Norway).

AMERICAN SUBSCRIBERS.—In reply to several enquiries, it may be stated that subscribers in the United States can be supplied with the *Mining Journal*, post free, at the price of \$8 gold per annum, payable in advance, by remitting to Mr. D. Van Nostrand, publisher, and importer of scientific books, &c., Murray-street, New York; or, direct to our Office, 26, Fleet-street, E.C.

\* \* The TITLE-PAGE and INDEX to VOLUME XLIII., for the year 1873, was published in the Supplement to the Journal of Jan. 24.

## THE MINING JOURNAL, Railway and Commercial Gazette.

LONDON, FEBRUARY 28, 1874.

### COLLIERS' WAGES, AND THE PRICE OF COAL.

There is now every appearance that we are on the eve of something like a struggle between capital and the interests of the country on one side, and the working colliers' on the other, and in which not only the wages of the miner but the price of coal will be involved. It is also evident that the fight will not be confined to one part of the kingdom, but will include several of our most important mining districts, unless the good sense of some of the men and their leaders agree to go with the times; and, as they participated in the advantages of a brisk and profitable season, submit with a good grace to a reduction of wages, following on a very great decrease in the price of coal. Already upwards of 2000 miners at Clay Cross, in Derbyshire, have submitted to a reduction in the amount previously paid for "getting" of 3d. per ton, or nearly equal to 15 per cent. The miners of Scotland, however, appear to have taken the initiative to prevent any reduction of wages by carrying resolutions to work only four days a week, or 32 hours, so that the production would not more than meet the requirements of consumers. For that purpose meetings have been held at several places, and at one held at Irvine, on Monday, Mr. McDONALD, the member for Stafford, advised the men to prepare for the struggle, and advocated a check on the supply, to meet what he terms "the evils of an overcrowded market." In plain words, this newly-fledged legislator considers that for the purpose of maintaining the wages of the miners at a point far above what the present state of the coal trade would warrant all other classes in the country are to be taxed. Of course, the greatest part of the burden would fall upon the working men and their families. It must, then, be most gratifying to the Trades' Unionists of Stafford, who probably do not earn as much money on the average in 24 hours as a miner can in six, to know that their member considers that to keep the latter in affluence and idleness they are either to go short of fuel or pay 15 or 20 per cent. more for it than they would otherwise have to do. Such a policy at the present time, when in many districts trade is languishing, owing to the high price of fuel, and where, as in Sheffield, numbers of men are only working four days a week, comes with a very bad grace from men who only a few weeks since in that town expressed so much sympathy for their brother workmen. Such thorough selfishness will, we believe, be fully understood, as well as condemned, by the astute metal workers of the hardware town.

But it must not be overlooked that when the advances were made to the colliers during the very exceptional state of the coal trade since July, 1872, it was tacitly understood by both sides that with a fall in the price of coal there should be a corresponding decrease in the wages of the men. The price of coal has fallen at least 30 per cent., yet the miners consider that wages should be the same. That we are not hazarding an opinion as regards the cost of coal now and what it was a year ago will be seen from the following figures, given on the highest authority, some of them being from the Blue Book published at the close of last year, and others from the most reliable sources. It was in the middle of July, 1872, that coal began to rise, having in London advanced to the consumer in three weeks from 28s. to 34s. per ton for best Wallsends delivered. There was not any material change from that time until January, 1873, when the cost was 37s., and by the close of the month it was 40s. per ton. The first day in February found the price advanced to 40s., by the close of the week it was 48s., and at the end of the next week it was no less than 52s. per ton. From that time until the end of December there was a gradual decline in prices, and at the close of the year the charge was not more than 34s. per ton. At the present time the best coal can be purchased at from 32s. to 33s. per ton, or from 18s. to 19s. per ton less than it was in February last, and not higher than it was in July, 1872. On the other hand, the wages of the colliers were advanced from 45 to 60 per cent. whilst coals were rising so rapidly, and now that they have fallen something like 30 or 33 per cent. the men consider that wages should remain the same in the present depressed state of the trade as they were during the season of its greatest prosperity. Under such circumstances, then, we believe that the miners will be unable, do what they will, to prevent a reduction of wages, especially as prices of coal will be considerably less than they now are. For it to be otherwise would be contrary to all the recognised principles regulating capital and labour—of the law of supply and demand. It would be in direct opposition to all our ideas of political economy, as well as to the ordinary rules of fairness which should characterise the dealings of workmen with their employers. The colliery owners have been obliged to succumb to the marked change which has taken place in the coal trade, owing to the production being largely in excess of the demand, although he has had to pay the same wages as when coal was at its highest, as well as considerably more for all colliery essentials required. On the other hand, those who sought for and obtained an advance of wages corresponding with the advance of coal now refuse to have in any way with the great reduction in the price of the article they produce. Mr. McDONALD, M.P., it would appear, thinks that such conduct on the part of the men is justifiable, although in the evidence he gave in May last before the Select Committee on Coal he said:—"That state of things which crippled the industries of any nation was adverse to the real welfare of it, and every honest man ought to deprecate it."

With those views, we have Mr. McDONALD actually advocating the limitation of production as a means of maintaining wages. Such a charge it may be said was brought against him by a member of the committee alluded to, but was answered by the statement that the speech referred to had not been reported correctly, so that the member for Stafford, like many other great men, was misinterpreted by a reporter—a refuge often taken by speakers when unpleasant parts of their speeches have been reproduced. But as the report of Mr. McDONALD's speech at Irvine on Monday last finds him giving the men similar advice—to limit production so as to maintain wages—we shall see whether he will again deny the imputation. If he does not, then all we can say is that we shall in no way have been dis-

appointed in our estimation of the qualifications of Mr. McDONALD for the position of a legislator. We shall also look forward with some little interest to see what course, if any, the working men, more especially those in Sheffield who have suffered so much from the high price of fuel, will take with regard to the resolution of their brother unionists, the Scotch miners.

However, we believe that the efforts of Mr. McDONALD and the men he represents to keep wages up in the existing state of trade will terminate in their complete discomfiture, and that if the miners will only work 32 hours a week they will give a very great impetus to the more general introduction of coal-getting machinery, now making considerable headway, and destined at no distant day to supersede a vast amount of manual labour. They will find their work can be done by "getters," that never strike but at the face of the coal, and that one of them will be able to do as much as 20 ordinary miners. Under any circumstances, the selfish policy the Scotch miners are attempting to carry out must ensure for them the hearty contempt of every thinking working man in the kingdom.

### NORTHERN MINING AND METALLURGY.

A complete change has come over the iron trade of the country since—and no doubt, also, partly in consequence of—the general elections. It was generally expected that the month which found the whole empire plunged in all the turmoil and excitement of a general parliamentary election would have found trade undergoing a recuperative process, and manufacturers of both pig and finished iron had laid their plans for higher prices and a large accession of orders. But all these expectations have been completely falsified by the result. At the commencement of the third month of the year trade is worse than it was two months ago, prices are lower, demand is duller, labour is less in request, and the prospects for the future are the reverse of cheering. How all this has come about it behoves us not now to enquire. The diagnoses of the case are extremely simple, and so self-evident that they require no demonstration. Scotch warrants were quoted at the beginning of 1874 at 109s. to 112s. per ton; now they are at a discount at less than 100s. The standard brand of Cleveland, No. 3, was then quoted at about 90s. per ton, but now it is scarcely enquired for at 75s. to 79s. The Conservative reaction seems to be but the precursor and reflex of a still greater reaction in the commerce of the country—a reaction respecting the ultimate results of which many different opinions are entertained, but one that is, perhaps, destined to be more thorough and of longer duration than the most of us anticipate.

It is not difficult to understand why the British iron trade should fail to maintain the prosperity of the last two years. The high prices exacted for all kinds of crude and manufactured metal during that time have virtually been prohibitory of foreign trade, and our foreign customers, unable and unwilling to pay those high rates, have with an energy and vigour never before exhibited, set themselves to develop their own resources, and become their own producers. This tendency is not confined to one nation, nor even to one continent; it is apparent in almost all the nations in Europe, but more especially in the United States of America, and seeing that they have now fairly taken the bull by the horns, we are justified in expecting that those countries which have hitherto drawn from England the great bulk of their iron will in course of time be able to supply themselves. This will necessarily be a work of time, for no nation can all at once rise to the level of supplying the whole of its requirements, no matter how rich its resources may be; but, in the long run, it is certain to come to pass that England will be more or less excluded from foreign competition. In this respect her position has largely changed already. The statistics of the Cleveland iron trade show that the shipments to America from the Tyne, Wear, and Tees, fell from 10,554 tons in 1871, to 3988 tons in 1872, and 1198 tons in 1873. To Germany, 122,535 tons were shipped from these ports in 1872, and only 100,744 tons in 1873. Russia received, via the north-east ports, 8875 tons in 1871, 1240 tons in 1872, and only 2809 tons in 1873—the most prosperous year of the three. The extent of the trade between Cleveland and Holland, Belgium, France, Sweden, Norway, and Denmark has steadily been increasing for some years past, but it is impossible to ignore the preparations that these countries are making for so far developing their own resources as to make them independent of Great Britain. And if the day should soon arrive when we shall be shut out from competition with those nations that have equal, or perhaps superior, resources to ourselves we may find, also, that the cheaper labour of the Continent, the cheaper rates of freight charged by the railway companies, and the many sources of economy which they have learned to practice, will enable them to compete with British manufacturers in such countries as have not within themselves the necessary resources of industrial development. These remarks may sound somewhat sensational, and those who are not disposed to look facts fairly in the face may be inclined to treat them lightly, and with scant credence; but all attentive readers of the *Mining Journal* must have been struck over and over again with the accounts published therein of the industrial development of foreign nations within the last two or three years.

Meanwhile the extension of manufacturing operations in the Cleveland district goes on apace. The present rate of production is about 75,000 tons per month. Of this quantity a considerable proportion is now finding its way into stocks at works, and a large nucleus is being formed for the new warrant stores, for which a company of the most influential ironmasters of the district has been formed to promote. These stores will be on an extensive scale. Their management will be conducted on the principles adopted by the Messrs. CONNALL of Glasgow, in whose stores there has sometimes been between 500,000 and 600,000 tons of pig-iron. There is a strong probability that the establishment of these stores will impart into the conduct of the Cleveland iron trade a permanent element of speculation, such as that which is so well and so largely carried out on 'Change at Glasgow, where the transactions in warrants represent from 5,000,000 to 10,000,000 a year, and are settled with a promptitude and an absence of default that reflects the greatest credit on the trade. A good deal is being done in the way of opening up new ironstone fields, and the construction of several new lines of railway now projected in the Cleveland district will give a great stimulus to mining operations. The consumption of the ores of Cleveland is, however, chiefly if not entirely confined to the district bearing that name, and there is little prospect of any great development of iron mining operations outside the immediate requirements of local manufacturers. The output of ironstone at the present time is amply sufficient for all the requirements of the trade; but, as there are always new furnaces in the course of building, the prospective extension of manufacturing operations will necessitate a larger consumption of ironstone. It is noticeable that the importation of foreign ores is very limited in the north-east ports. The Bilbao mines, in Spain, being still in the hands of the Carlists, are virtually closed, and no other large sources of foreign supply have yet been opened up. Steps are, however, being taken for the development on a large scale of some very rich mines in Portugal, some of the ore of which shows to analysis from 40 to 50 per cent. of manganese.

The result of the general elections has been to give a large and influential representation to the North of England iron and coal trade. The loss of his seat by Mr. GEORGE ELLIOT will be a blow to the mining interest of Durham, for no one was more conversant with the requirements of the coal trade than he, and no one took a more active interest in everything calculated to further and stimulate that industry. But it is noteworthy that both of the new members for North Durham are largely concerned in both mining and metallurgy. Mr. C. M. PALMER is not only a shipbuilder of European fame, but he is the owner of ironstone mines near Whitby, of blast-furnaces and finished ironworks at Jarrow, and of extensive collieries in the county of Durham. Mr. I. L. BELL, his colleague, is one of the largest mineral owners and metallurgists in the country, and a gentleman, moreover, whose researches and discoveries in the chemistry of iron smelting have made his name famous in both the old world and the new. Mr. BOLCKOW, the head of the great firm of BOLCKOW, VAUGHAN, and Co., is again returned for Middlesbrough, a town which is, to a large extent, one of his own creation. Mr. JOSEPH DODDS, who holds many positions in con-

nection with the iron and coal trades of the North, including the chairmanship of the North Yorkshire Iron Company, of the Tees Bridge Iron Company, and of the Bowesfield Iron Company, the vice-chairmanship of the Great Darlington Iron Company, and the chairmanship and vice-chairmanship of several colliery companies, is again returned as the representative for Stockton. Mr. JOSEPH WHITWELL PEASE, head of the great firms of J. W. PEASE and Co., and J. PEASE and Partners, and one of the greatest authorities on coal mining in the late Parliament, is again returned for South Durham. Mr. W. B. BEAUMONT, M.P. for South Northumberland, and Major BEAUMONT, the junior M.P. for South Durham, are both representatives of the lead mining industry of the North; and it is worthy of remark that of the 13 members of Durham county only two are unconnected with its staple industry.

The impression that the day of high prices in the coal trade has passed away is gaining strength day by day. The very large extension of colliery operations undertaken during the past two years has thrown upon the market a largely augmented supply of coal. Besides this, the colliers have been working much more steadily and regularly during the last month or two—making due allowances, of course, for the Christmas holidays and the election excitement—than they did during the days of the coal famine. It seems, indeed, as if the colliers made it a rule to restrict their labour when coal is scarce, and to increase their work when coal is plentiful. This, at any rate, has been their recent practice, and the tendency has been to stock the market with coal to such an extent that prices have necessarily been borne down. There is also a large quantity of coal in the hands of merchants and producers, for which purchasers cannot be found; and rather than risk the loss involved in this state of matters some owners have limited the work of their pits. How far coals will fall in price is now the question of the hour. It is not expected they will soon, if ever, reach the ruinously low figure of 5s. per ton, but that they will become cheaper than they are at the present time is tolerably evident. Manufacturers are always bringing more coal into the market, and the ratio of advance is likely to continue for a long time to come. There is no proportionate increment of demand, for in the iron trade, which consumes about 40 per cent. of the total output of coal, there is a slackness almost amounting to stagnation. It is rumoured that in the course of this month household coals will be reduced 3s. per ton, and if this turns out to be true the fall for the last six months will represent fully 12s. per ton. There is still a tolerably brisk demand for coke, but sellers cannot obtain more than 30s. per ton for the very best qualities, so that the drop since August last, when best coke was 45s., has been 15s. per ton. Prices, however, are still high enough to leave coalowners with profits and colliers with wages such as can be found in, perhaps, no other industry.

### COAL MINING IN BELGIUM.

Belgian colliery companies were generally carried on with success in 1873. A few details which we proceed to group together will readily substantiate this assertion. The Produits Colliery Company continued last year its exploratory operations in the north of its concession, but it did not make any very great progress with them. The works are expected, however, to advance more rapidly as soon as the installation of a compressed air-engine has been completed. The Levant du Fleny Company has also been engaged in exploratory operations, and the result has been satisfactory, a large quantity of fresh coal having been discovered. Improvements carried out last year in regard to working have also produced the results which had been expected from them; sensible economies will be realised from new means of traction, and also from sundry mechanical arrangements which have been applied upon a large scale. The Couchant du Fleny Company participated in the exceptional prosperity which was enjoyed by the Belgian coal trade last year; at the same time it is useless to attempt to conceal the fact that the duration of the company's present working is restricted to a comparatively limited number of years. In presence of this state of things, the council of administration has been obliged to assure the future of the company by prudent reserves, and more than one-fourth of the shares have accordingly been redeemed. The Crachet et Picquery Company was enabled last year to offer to its shareholders, who had long awaited better days, a substantial compensation for their past disappointments; three-fifths of the company's consolidated debt, which amounted to 20,000l., were also paid off last year. At the Hornu and Wasmes Colliery the extraction of 1873 was inferior to that of 1872. This state of things was attributable to the falling off in the amount of useful labour performed by each working miner, while working operations were suspended at one of the company's extraction pits in order to provide for urgent repairs. The financial condition of the undertaking is now so good—at any rate, so relatively good—that the statutory reserve has been invested in Belgian 4 per cent. stock; the reserve has thus become quite independent of the general floating capital of the company.

In consequence of the advantageous results obtained in 1873, the West of Mons United Collieries Company was enabled, notwithstanding the scarcity and dearth of labour, to continue the works of improvement undertaken by it without the financial condition of the concern being at all aggravated. A new sort of extraction operations on the Belle-Vue concession is also in course of development, and hopes are entertained that in the course of this year the coal which is to be worked will be reached. The Monceau Fontaine and Martinet Colliery Company displayed great activity in its working operations last year, and it also acquired upon favourable terms a large number of shares in the Picton Centre Colliery. Favourable results attained in 1873 enabled the Sars-Longchamps and Bouvy Colliery Company to effect considerable redemptions of capital; the administration also formed in 1873 a special reserve fund in order to provide for special expenses resulting from new workings undertaken in the course of the past year. The last annuity of a loan of 16,000l., contracted for ten years in 1863, was paid off at the close of December, 1873. The two pits of the Bray-Maurage and Boussoit Colliery Company have been carried to a depth of 1216 feet. The beds discovered at present are five in number, and their thickness ranges from 18 in. to 24 in.; although the beds do not form part of the regular series of the Centre group, they produce coal of excellent quality. An extraction-engine of 200-horse power is in course of construction, and will be installed in July. The Belgian General Company for Promoting the National Industry of Belgium has purchased the greater part of the shares in the Réunion Collieries, at Mont-sur-Marchienne; the concession of the Réunion Company is one of the largest and most important in Belgium. As regards the workings of the Charleroi United Collieries Company, it may be observed that the extraction was interrupted to some extent in 1873, especially during the first half of the year, by the great quantities of water which had to be dealt with, and for the removal of which it was found necessary to invoke the aid of the extraction-engines as well as of the pumping-machines, the latter having proved insufficient for the purpose. During the past year the company brought into operation an engine of 1000-horse power; this new engine, which was constructed by the Marcinelle and Couillet Company, has worked extremely well. The dividend paid by this company for the past year was 1l. 16s. per share. Before quitting the topic of Belgian colliery property we may advantageously note that the average return realised in 1873 by the General Company for Promoting the National Industry of Belgium, upon its colliery investments, was 10·12 per cent.—an altogether exceptional result, which is not likely to be repeated in 1874.

COAL AND IRON IN THE UNITED STATES.—A revival of railroad construction is anticipated on the part of the old-established railroad corporations of the United States, and the result will be a corresponding demand for iron and steel. The Philadelphia, Washington, and Baltimore Railroad Company has been making renewals of late wholly with steel. Upwards of 20 miles of track were thus re-laid in steel in 1873, and the company has now 110 miles of track in steel. The company charges its steel rail renewals against revenue. The chief engineer of the Philadelphia and Reading Railroad states in his report that 8374 tons of steel rails have been laid in all upon that system. At one of the most trying places in Read-



ing 41 tons of steel rails were laid down in 1867, and they have since done excellent service, while an iron rail never lasted more than four months at the same place. The coal tonnage of Pennsylvania in the first three weeks of this year amounted to 1,259,023 tons, against 1,390,461 tons in the corresponding period of 1873.

**COAL MINES REGULATION ACT—CERTIFICATES OF COMPETENCY.**—Although the desirability of permitting candidates willing to submit to competitive examinations to have some general idea of the nature of the examination they have to undergo, it seems that the late Government, although professing Liberal principles, were really so illiberal as to require the candidate for the most important honour—the certificate of competency as a colliery manager—to present himself to the examiners without any previous preparation, and answer any questions which their caprice might suggest. In consequence of the numerous applications which have been received from aspirants to the honour for information as to the subjects they ought to study whilst pursuing their ordinary avocations of underground overmen, deputies, and so on, we requested the late Home Secretary to supply a copy of a set of examination papers used in some past examination, and offered to print them gratuitously for the benefit of those interested, but, perhaps, because he was smarting from the annoyance of impending expulsion from office the subjoined characteristic reply was received:—

Whitehall, Feb. 19, 1874.  
“Sir, I am directed by Mr. Secretary Lowe to acknowledge the receipt of your letter of the 18th inst., and to inform you in reply that he must decline to furnish for publication copies of Examination Papers for Certificates of Competency under the Coal Mines Regulation Act, 1872.”

I am, Sir, your obedient servant,  
A. F. O. LIDDELL.  
The Editor of the Mining Journal, 25, Fleet-street, E.C.  
It is so usual to publish, after competitive examinations, copies of the papers set, and upon the answering of which the awards have been made, that the adoption of the opposite course naturally gives rise to sinister statements as to the *bona fides* of the examination. Either the certificate is granted upon the general reputation of the candidate, and the examination is a myth; or some standard of merit has been determined upon which, in common justice to aspirants as a body, should be made known by the publication of the papers which have been set. The exclusion of the papers of former examinations from the calendars of our universities would materially lower the graduates in the estimation of the world, and secrecy with regard to the examinations which must be passed in order to qualify for the certificate of competency cannot but lower the colliery manager in the estimation of the public, and deprive him of the confidence of the working colliers. Mr. Lowe's secret policy in this case cannot be considered consistent with his position of parliamentary representative of the only radical and communistic university in the kingdom.

**COAL MINING IN IRELAND.**—In the beginning of 1873 an English firm, Messrs. Robson, Grace, and Co., leased a royalty in Kilkenny from Mr. George Bryan, M.P. Operations for winning the coal began in February, when great and unexpected difficulties were met with, through a large deposit of sand and gravel—no less than 18 fms. having to be sunk through before the rock was reached. This was, however, accomplished, and the shaft securely cased or lined with bricks, set with cement. The sinking then proceeded, and on Feb. 7, 1874, a seam of coal was cut at a depth of 49 fms., which was proved to be 5 feet in thickness on the stone; however, on sinking further the stone was found to be only 3 inches in thickness, and there were other 2 feet of coal below it, making a seam of 7 ft. in thickness altogether. The mining engineer who had control of the sinking operations is Mr. Thos. Robson, of Lumley Thicks, Durham.

**COAL IN INDIA.**—Mr. Malcolm, of the Geological Survey Department, has made a very important discovery of coal near Pankabaree, at the foot of the Darjeeling hills. The largest seam is 11 ft. thick, another is 7 ft., and there are several measuring from 2 to 5 feet. A sample from one of the beds has been analysed, and yielded as much as 80 per cent. of carbon.

**CHALK AS FUEL.**—At a meeting recently reported in the *Mining Journal* the Rev. Mr. Vignoles stated, and it may be presumed that he did so as the result of his professional experience, that he had always found it best to believe as little as possible of anything, and, doubtless, most persons will be inclined to adopt his recommendation in judging of the letter of one of his reverend brethren—the Rev. Henry Moule—advocating what is practically the substitution of chalk for coal. The reverend gentleman acknowledges his chemical ignorance, explaining the cause of it by remarking that he has never found time for either chemical or scientific research, and no one would venture to question his assertion, since its truth is abundantly confirmed by the other portions of his letter. There is really nothing extraordinary in Mr. Moule's statement that a good fire (rather an indefinite mode of measurement, scientifically considered) was maintained for 29 hours in his church furnace with 56 lbs. of anthracite by checking the combustion with an equal quantity of chalk, and he would probably find that under certain conditions a sheet of paper would produce the same effect as the 56 lbs. of chalk. If the bottom of an ordinary grate be covered with a sheet of paper and 50 lbs. of cold coal be placed upon it, the remaining 6 lbs. being used for kindling a fire on the top, Mr. Moule will find no difficulty in maintaining what he would, doubtless, describe as a good fire for 29 hours; and, as in his case, the last 24 hours without attention. It is a mere question of regulating the combustion as to how long the fire would burn, but what Mr. Moule has to prove (and the merest theologian will understand enough of logic to admit this) is that by combining 56 lbs. of chalk with 56 lbs. of anthracite coal he can develop a larger number of units of heat than can be developed from 56 lbs. of similar coal without the chalk. This Mr. Moule has not yet proved, and until he does so it is extremely unlikely that he will find anyone to purchase his secret in order to offer it as a present to the public. Mr. Moule does not appear to recognise a difference between carbonic oxide and carbonic acid, which is quite excusable after his statement, and it is doubtless owing to a similar confusion of ideas, coupled with the fact of his having forgotten to consider the illuminating power of his gas, as he had forgotten the heating power of his furnace, that he expects to get from a ton of kummeridge shale and chalk eight times as much gas as from a ton of ordinary coal. The world is not likely to suffer from Mr. Moule's secret remaining undivulged.

**AUSTRALIAN GOLD.**—The value of the Australian gold imported into the United Kingdom in January was 557,855*l.*, as compared with 1,289,952*l.* in January, 1873, and 994,541*l.* in January, 1872. There has been some little stir of late as regards alluvial mining in New South Wales. A good patch of new ground has been struck at the Forest, and at Cargo, on some ground which has been fairly payable, a second bottom has been found, showing heavier gold than was obtained in the first instance. At Forbes, also, some very large nuggets have been found. Several excellent yields of gold have been lately obtained at Gympie, Charters Towers, and the Etheridge River, Queensland.

**CORNWALL MINERALS RAILWAY COMPANY.**—At the second ordinary general meeting on Thursday (Mr. A. C. Sheriff, M.P., in the chair), a highly interesting report was presented, in which it was stated that the very vigorous action of the contractor in pushing forward the works during the past year justifies the confident expectation that all the lines will be opened for mineral traffic during the ensuing month or early in April. With this prospect before the company the directors have thought it preferable not to open the lines in section, as was contemplated at the date of their last report. The Cornish Consolidated Iron Mines Corporation, and other mineral owners on the line of railway, have for some time back been engaged in raising large quantities of ore, which will be forwarded by the railway immediately on its being opened for public traffic. In addition to this source of revenue the trade in china-clay is rapidly increasing, and will form a very considerable item in the railway traffic from the commencement. Arrangements are in progress for a large return traffic in coal to the various stations and works on the line. The erection of blast furnaces at Par by an independent company will, doubtless, be followed by the establishment of other works of a similar description at other parts of the railway. For the management in Cornwall the directors have selected Mr. Richardson, a gentleman who has had long experience on the North-Eastern and other lines, in the conduct of large mineral, as well as of passenger and general goods traffic. They have also appointed a locomotive superintendent, and other competent officers necessary to the efficient working of the lines. Up to the present time 13 engines and 420 wagons have been ordered from various manufacturing companies, of which 11 engines and 28 wagons have been delivered at the company's depot at Par, where the whole of the remainder may be expected to

arrive during the present month and the early part of March. The Chairman remarked that he had little to add to the report, for in an unopened line they could state nothing except how the works were going on. The directors had been in communication with parties whom they believed to be influential, and these would undertake to find whatever shipping may be required at the port of Fowey, to carry the minerals to South Wales and elsewhere. This was of great importance to the company, as much time and money were often required to open new ports, and this they would avoid. The report and accounts were unanimously adopted, and the retiring directors and auditor were re-elected.

**THE BEST MINING MACHINERY—GOLDSWORTHY'S PRIZE ESSAY.**—The admirable essay which received honourable mention in the competition for the prize offered by “A Former Correspondent” of the *Mining Journal*, and earned a first prize—the James Watt Medal—from the Royal Cornwall Polytechnic Society, has been reprinted, with alterations and additions, in pamphlet form, and will be forwarded from our office on receipt of 13 stamps. We remarked at the time that although our office had only received the prize which the author had received, the prize appeared to approach more closely to the character of paper demanded by the giver of the prize, was very properly declared to be so admirable that it could scarcely be too highly praised; indeed, for ability and practical utility, Mr. Goldsworthy's paper was unquestionably superior, and the opinion was in every way justifiable that it could not be read without feeling that it is written by one who is perfect master of the subject on which he writes. From Mr. Goldsworthy's essay there is a very large amount of really sound practical knowledge to be acquired; and if this knowledge be utilised it cannot fail to confer immense advantage upon the entire mining community, whilst the ability which the author has displayed in handling the subject will doubtless increase his reputation, already high, as an efficient miner, and thus become of considerable pecuniary benefit to himself. That he has proved the truth of his assertion that the best machinery is not the most modern will be readily admitted when his paper has been read, and it will be acknowledged that the good old type of engine—the single-acting Cornish pumping engine—is not equalled by any of the new forms now employed: although the duty is said to have dropped off this is not really the case. The difference of duty now, as compared with 50 years ago, will be found to be owing to the inferior coal now used, as may be verified by the agents' reports in most of our great mines, more especially during the last winter months, when coal was so scarce. He furnishes an invaluable table of the duty of engines of this class, which will be of the utmost utility for permanent reference. In a similar way he refers to the best kind of pistons, to the patent four-beat pump valves, boilers, pit-work, water-power, windmills (some of which, exceeding 100-horse power, he mentions as being successfully employed in Holland for purposes analogous to those connected with mining), hoisting, rock-boring, blasting, stamping, pulverisers, ore dressing in all its stages, mining tools, &c.—in fact, it is difficult to see how the essay could be made more complete or more useful. The pamphlet will, doubtless, have a very extensive circulation.

#### TRADE OF THE TYNE AND WEAR.

Feb. 26.—The Coal Trade continues very quiet, with a downward tendency in prices for most descriptions of coal; those who have not made contracts refuse to do so at present, evidently expecting that further reductions will be made shortly. It is stated that the masters in South Durham contemplate making a proposal shortly to reduce the men's wages 10 per cent., and this cannot be much longer delayed we fear. However, the demand for gas coal is still pretty good, and steam coal has not fallen much in value yet. House coal is, however, more plentiful; and manufacturing coal is also to be had in plenty at lower rates. Coke continues to maintain its value, and best qualities are still over 30s. per ton. The men in both counties are working very steadily, and the output of all kinds of coal has been large lately.

The extension of the coal trade still continues. A small colliery has been worked at Horsley-on-Tyne, about 8 miles west of Newcastle, for a very long period; and a company has been formed lately for the purpose of extending the works and proving and working the lower valuable coal seams. The capital of the company is to be 70,000*l.*, and several well-known men in the district have taken shares. Mr. Cook, of Washington, is a large shareholder; Mr. Robson, an eminent viewer under the Earl of Durham, has also taken shares, and he is likely to take a prominent part in the management of the undertaking. The attention of this company will, no doubt, be directed to the manufacture of coke when the works are sufficiently developed.

The Iron Trade continues dull, but pigs are still (No. 3) 80s. per ton, and as the stocks in the hands of makers do not exceed 100,000 tons, there is not much cause for complaint. The finished iron trade is somewhat improved. The iron shipbuilding trade is very healthy at present, and most of the works (foundries and engine works) are pretty well supplied with orders. There is a good demand for marine engines and boilers, and large orders have been received at the first-class works for locomotive engines.

The Iron and Coal Trades in Cumberland continue very dull; a good deal of coal has been stacked lately. At a meeting of colliery owners, on Tuesday, it was resolved to reduce the price of coal shipped 2s. per ton, and the price at the pits 1s. 8d. per ton, but it is not likely that this concession will induce much more business. The iron manufacturers of the district complain much of the price they are charged for coal, and apparently with reason, as the price shuts them out at present from most of the markets, as iron-makers in Scotland and the South of England are getting coal at little more than half the price paid for it at present in Cumberland. This policy, if persevered in, will in the end injure all the parties concerned, but it is not fair to charge the coalowners with this alone, as the action of the Trade Unions, so long as they keep the rate of wages at the present level, will prevent the masters reducing the price of coal to any great extent. Although coal has fallen enormously in all districts, yet the workmen strongly resist any proposed reduction in the rates paid to them. It is scarcely possible that this state of affairs can continue for any lengthened period.

#### REPORT FROM CORNWALL.

Feb. 26.—There has been one small feature of encouragement this week as compared with recent ones, although it is of a negative character. There has been no further fall in the price of tin. This so far bears out the opinion expressed by Mr. T. S. Bolitho at the Botallack account—that he believed things were at their worst, and that if we did not see a substantial rise before long we should see a firmer market. There is nothing to be over sanguine about in all this, but still it should be remembered that in other directions the prospects are certainly brighter. Coal and materials are on the downward turn, nor is there likely to be any deficiency in labour, seeing that some mines must succumb to the pressure, and that there is by no means the same disposition either to emigrate or migrate that there has been of late. The true policy of those who hold shares in mines of a fairly promising character, especially those in which the returns are such that when better times come dividends are reasonably to be anticipated, is to reduce expenditure within all reasonable limits, and hold on.

We are glad to find that the lords generally are recognising the justice of surrendering or reducing their dues to meet the present crisis. Nothing could be more inequitable than that the lords should be making profits whilst the adventurers are making only losses. Even when dues are given up altogether the advantage is wholly on the side of the lords, for they cannot be out of pocket, whilst the chances under present conditions are evidently that for the time the adventurers may.

The five-weeks month is to be brought to a practical issue. It has been returned to at Rosewarne United and West Tolgus. At the former mine, where circumstances were complicated by the reduction of the nominal standard between the mine and the men from 60*l.* to 50*l.*, there has been a strike. Of course, if labour is plentiful, in the present state of mining wages must fall; there must be economy somewhere, but here, as elsewhere, there are difficulties in the way, which, however, a course of conduct at once bold and judicious can meet.

On a general survey of the present conditions of mining, such are the reflections that naturally occur to us, that while the immediate future may have its difficulties the prospects are clearly improving. But as we look a little further ahead the reasons for the feeling of despondency which is at present too prevalent seem of a very unstable character. We are, to all appearances, at the worst. Whatever changes may take place, and mining is never long without them, must be in favour of the legitimate adventurer. Mines that ought never to have been started may yield to pressure at such a time as this and sink, but they are better out of the way, and their loss is the gain of those that are left. When we know that there are immense quantities of tin ground now open in the county, that with the present tendencies towards a reduced expenditure a very

moderate rise in the standard would make it paying, it must be recognised that Cornish mining is by no means dead yet. It is simply passing through one of its periods of fluctuation, of which the wise take advantage. No better instance of what is to be done by the sagacious and bold investor at such a moment of depression as at present occurs to me just now than a remark made by Mr. William Harris at the East Basset meeting. Thirty years ago, when West Basset was in difficulties, he went in heavily, and realised 10,000*l.* It is quite true, in the words of Mr. Harris, that nothing pays so well as holding on when the mine is in a good district. That is our advice to our friends who have shares in such mines. To those who have not we should recommend investment. There are a score of mines which at present prices may be bought into for little more than the value of the plant, with the certainty in the case of five out of six of a rapid rise directly the tide, which is just now at a standstill, begins to flow again. The truth is that in spite of drawbacks and difficulties the basis of Cornish mining is sound, but as “faint heart never won fair lady,” so the timid adventurer not only misses the prize he fair would win, but damages the prospects of others. There is a time to buy and a time to sell; and this is emphatically one for purchase.

Property, checked for the time in the East and the West, seems to be steadily on the rise in the central part of the county, in consequence of the amazing development of the china-clay trade. Within a few months the great network of lines which forms the system of the Cornwall Minerals Railway, will be at work, and then we shall see an increased development not only of the clay but of the iron ore of the district. The meetings of the New Quay and Cornwall Junction and Loswithal and Fowey Railways were held on Monday, but were little other than formal, three concerns having become part of the Cornwall mineral system.

To-morrow will be held the half-yearly meeting of the Cornwall Railway. There has been a substantial increase in traffic, but this has been far more than swallowed up by increased working expenses, chiefly renewals due to the miserable wooden viaducts. Far better that the bull should be taken by the horns, and these be replaced at once.

Cornwall has lost one of its leading men of business, Mr. John Freeman, of Falmouth, who died at his residence last week. Mr. Freeman was a large employer of labour, being the principal of the firm of Messrs. John Freeman and Sons, the extensive granite merchants, having large works at Penryn and Penzance, and owning numerous quarries at Penryn, Mabe, Constantine, Cheesewring, and Dartmoor. The firm were the contractors for the granite for the Thames Embankment and the docks at Keyham. He was always considerate to his large staff of workmen, and among them his loss will be deeply deplored. Amongst his townsmen at Falmouth he was highly respected; and by his death the poor have lost a considerate and warm-hearted friend. Mrs. Freeman survives her husband, and he also leaves three sons, two in the business, and the third a barrister, and several daughters. The deceased gentleman was in the 74th year of his age.

#### REPORT FROM SCOTLAND.

Feb. 25.—We have again to report a further reduction in prices of Pig-Iron. On Wednesday last the market opened at 92s. 9d., from which it gradually receded until 86s. 6d. cash was touched, rallying from this point to 88s. 6d., which was the closing price on Monday afternoon. Yesterday the tone was rather firmer, and a fair amount of business was done up to 90s., closing, buyers 89s., sellers 89s. 3d. To-day the market was quiet, with business from 88s. 6d. to 87s. 6d. cash, closing with buyers at latter price, sellers asking 88s. Under-noted are quotations for makers' iron, which are still irregular:—

|   | No. 1.        | No. 2.   |
|---|---------------|----------|
| Gartsherrie at Glasgow (deliverable alongside)..... | 100s. 0d..... | 93s. 0d. |
| Coltness ditto ditto.....                           | 102 0.....    | 92 0     |
| Summerlee ditto ditto.....                          | 97 6.....     | 90 0     |
| Carnbroe ditto ditto.....                           | 97 6.....     | 92 6     |
| Monkland ditto ditto.....                           | 92 0.....     | 90 0     |
| Clyde ditto ditto.....                              | 92 0.....     | 90 0     |
| Govan, at Broomielaw ditto.....                     | 92 0.....     | 90 0     |
| Langloan, at Port Dundas ditto.....                 | 100 0.....    | 92 6     |
| Caldar ditto ditto.....                             | 102 0.....    | 91 0     |
| Glengarnock, at Ardrossan ditto.....                | 98 0.....     | 92 0     |
| Eglinton ditto ditto.....                           | 93 0.....     | 91 0     |
| Dalmellington ditto ditto.....                      | 94 0.....     | 92 0     |
| Carroll, at Grangemouth, selected, ditto.....       | 103 6.....    | —        |
| Shotts, at Leith ditto.....                         | 105 0.....    | 97 6     |
| Kinnell, at Boness ditto.....                       | 97 0.....     | 92 6     |

|  |      |        |
|--|------|--------|
| Week ending Feb. 22, 1873.....                       | Tons | 12,312 |
| Week ending Feb. 21, 1874.....                       |      | 9,286  |
| Decrease.....  |      | 3,026  |
| Total decrease since Dec. 25, 1873.....              |      | 26,484 |
| Imports of Middlesbrough pig-iron into Grangemouth:— |      |        |
| Week ending Feb. 21, 1874.....                       | Tons | 2,733  |
| Week ending Feb. 22, 1873.....                       |      | 5,000  |
| Decrease.....  |      | 2,267  |
| Total increase for 1874.....                         |      | 9,427  |

The supply of native iron ore is increasing. Arrivals from foreign ports are becoming more numerous (although the principal Spanish port is still under military restrictions), and prices are drooping. The decline in the warrant market is undoubtedly weakening the price of ore, and unless there is a renewal of the demand for pigs we can only look for still lower prices. A few enquiries from Germany are reaching us from week to week, but the demand from America is as quiet as if it had shared the fate of Pompeii. It seems as if there were to be no rallying of the bar-iron trade, as makers are of opinion that in a few weeks they will have to close for want of work. In order to coax buyers they have reduced their quotations privately 5s., 10s., 15s., and some even 20s. per ton, and all that these reductions brought forth would not make a single good line. At the beginning of the month it is expected that a reduction of 20s. per ton will be declared on present quotations, but there is nothing offering to give hope that the reduction will bring a revival of trade. Angle-iron and plates are better than bar-iron, and these descriptions, as well as nail-roads, are giving an aspect of steadiness to some of the works, both here and in the Coatbridge district. Some of our melters are busy with contracts for pipes, and a good deal is also doing in machinery for shipment. During last week, from the small port of Grangemouth, we exported castings to the value of 4376*l.*, and bars valued at 1218*l.* From the Clyde ports the shipments for the week were limited.

The shipments of coal for the last eight days have slightly improved on those for the corresponding week of last year, the respective figures being 33,339 tons, against 28,128 tons in the same week of 1873, and prices are a little firmer. But coals are undoubtedly becoming more abundant, and lower prices are unpreventable, notwithstanding the nostrum that is being pumped into the heads of the colliers by some new-fledged M.P.'s. What are we to think of the legislative ability of those who gravely inform the ignorant or the unreasoning that if they only abstain from working a certain portion of the week they will receive as much pay for that as for the whole week, while the demand for the article is ceasing through its increased cost? Cheaper fuel must be found for the manufacturing industries of the country; and is the man a patriot or a safe legislator who would so mislead those depending on his advice as to make them believe that idleness is thrift, or that half a week's work is sure to bring a week's pay? The Fifehire coal trade has improved this week, and several vessels have had to go down from Grangemouth to load coal, owing to the strike at the Grangemouth Coal Company's pits. The prices here, f.o.b., are—Main coal, 13s. 6d. to 14s.; burnt coal, 17s. 6d.; smithy, 18s. to 20s.; coke, malting, 34s.; Benniehill ditto, 36s. to 40s. per ton.

The Hamilton Town Council have accepted the offer of Messrs. Thomson and Alston to work the minerals in the town lands, in conjunction with adjoining coal fields in the Wellhead and Auchingranton estates, the proposal being for a lease for 31 years, at a fixed rental of 350*l.* for the first year, rising to 500*l.* per annum, with a “lordship” of 10*l.* per ton on all coal passed through the screen, surface damage to be assessed at 15*l.* per acre.

Mr. Alex. McDonald, M.P., is staring it through the mining districts, and is making some remarkable speeches. At a complimentary supper at Holytown, in this neighbourhood, he informed his admiring auditors that “He had wielded a power among the working men of this country such as no other man ever did, and very possibly such as no other man ever would do again. That power was not diminished—nay, it was very largely increased. When he first came to Holytown, he was known only in Scotland, and even there had not visited the mining districts to any extent, but since then there was not a single village almost in the entire mining area of England and Wales that he had not visited, nor one in which his influence was not now felt. Under his direct control were more than 150,000 men, who took their law and order from him, as if he were the governor of a State.” Perhaps it might be asked, who has benefited by the power Mr. McDonald has wielded over the miners so much as himself? What beneficial measures did he unaided ever secure for them? The ameliorations which have been intro-



duced into life at our coal fields has been the combined result of discoveries, stimulated by the liberality of the great coal and iron masters of the country, and the progressive enlightenment of the age.

#### REPORT FROM LANCASHIRE AND CHESHIRE.

Feb. 26.—The downward movement in the prices of coal referred to in my last report continues, and intimations have already been issued by some of the concerns in the neighbourhood of Manchester that on the 1st of next month a further reduction, at the rate of 1s. 8d. on slack and 10d. on other descriptions, will be made. The way in which the demand has fallen off is hardly credible, and the prospects of trade are certainly very gloomy. In canal, however, and all kinds of coal that can be used for gas-making there is still a good business doing. Coke is falling in price, and enquiries are by no means numerous.

The only probability that is talked of as likely to be helpful to the trade is the opening of the shipping season, but in this department the look-out is by no means encouraging.

A meeting of the West Lancashire Coal Association has been held in Liverpool recently, and one of the subjects discussed was the desirability of making a reduction of 15 per cent. in wages. No resolution was, however, come to, but it is very probable that the reduction will take place at another meeting, to be held in a few days.

The probability is that the reduction will be quietly accepted. Mr. McDonald, M.P., is advocating the adoption of a course similar to that which was followed in 1868, when the miners attempted to limit the output of coal, and a resolution in favour of such a course has been passed by a committee of the Miners' Association for the Wigan district. It is very likely that the masters here would not object to such a limit, provided the same system were introduced in every mining district throughout the kingdom, but it is clearly of no use for one district to attempt such a thing while its neighbours are underbidding it in the market.

The Wigan Iron Coal and Iron Company's dividend is after the rate of 16 per cent.

The Iron Trade of the district is in a very unsatisfactory state, and very little business is being done, except in the neighbourhood of Burnley.

The strike at Haydock is at an end, and the masters' terms are being accepted by the men. At Burnley there are still 1000 men on strike, and it is stated that they have already cost the Amalgamated Association over 20,000l. Mr. Halliday, speaking the other day, stated that writs had been issued against the employers for prosecuting for conspiracy without there being evidence to support the charge, and that a greater blow could not have been given to the present state of the law than would be given by the present trials.

#### REPORT FROM MONMOUTH AND SOUTH WALES.

Feb. 26.—There is not only no improvement to be noticed in the Iron Trade, but things appear to be getting worse instead of better. Enquiries are, however, made from time to time for most descriptions of iron, but very few orders are placed. That stocks are low in all quarters seems to be generally admitted; still buyers adhere to the old policy of limiting transactions; and in this it must be admitted they have received a little encouragement of late, as the rumours of reductions being made in the prices of coal in other districts have led them to believe that there is a general downward tendency in the cost of manufacture, and, therefore, they look forward to reductions in the price of iron. Fuel and the raw materials must, however, be very considerably reduced in value before makers will be enabled to make any material reductions in quotations for finished iron. There is, in fact, so far as this district is concerned, no appreciable alteration in the values of any of the commodities raised or manufactured.

Stocking bar-iron is going on extensively at nearly all the large establishments, and by adopting this course the ironmasters are able so far to keep their works going at the same rate. There is a good deal of time lost, however, and although the works receive good remuneration for every ton of tin they manufacture, yet they have not made enough tons for some time past to enable them to earn the large wages they did some time ago. The time is drawing still nearer, however, when the Russian shipping season will be expected, and if the transactions with that country be so large as expected they will cause appreciable movement in business. There are reports of iron during the past week have included the following:—Corunna, 320 tons rails; Rosario, 311 tons rails; Rio de Janeiro 430 tons rails; Callao, 1300 tons rails; Rio de Janeiro, 500 tons rails; and Gothenburg, 513 tons rails.

The accounts of the Myynell Iron Ore Company show a balance of 18,000l. on the last year's working, and the shareholders receive out of that sum a dividend of 6s. 6d. per share, including the interim dividend of 6s. 6d. paid in July last. On the recommendation of the directors 4000l. has been devoted to the redemption of debentures due on the 1st of Jan. last. A report from Capt. Vivian stated that there were in all 52,000 tons of iron ore raised last year, which was 3000 tons more than in the previous half year. It is expected that the current year will be a profitable one, and that some valuable discoveries will be made.

In reference to the Tin-Plate Trade it may be said that matters continue, on the whole, satisfactory.

Taking the Coal Trade in all its branches, it must be admitted that it is not so brisk as it has been. There is still a good demand for steam coals, however, and prices are tolerably firm. But for the inferior qualities of fuel there is not so large an enquiry. House coal fluctuates with the changes in the weather, but there is a general falling off in the demand. But proprietors still adhere to quotations, and although their pits are hardly half employed, they will not let prices drop.

The local railway companies were prosperous in the last half-year. The Taff Vale gross receipts amounted to 248,818l., as against 231,529l. in the corresponding half of 1873. The company pays a dividend at the rate of 10 per cent. per annum, with a bonus of 1 per cent. The Monmouth Railway will declare a dividend at the rate of 8 per cent. per annum, against 5 per cent. in the previous half-year. The Sirhowy pays at the rate of 10 per cent.

#### REPORT FROM DERBYSHIRE AND YORKSHIRE.

Feb. 26.—The trade of Derbyshire in lead, iron, and coal has undergone little change since last report. The lead miners are working steadily, but a great many of them make but small wages as compared with their more favoured brethren who delve in our collieries. They are, however, a far more contented race, and work more harmoniously with their employers. The production of lead ore is of about average proportions, and at present there are scarcely any new places being opened. This is just the reverse with regard to collieries, for they are being opened out in all directions—the black shale having just been reached at one at Unstone, whilst the same seam is about to sink down to a short distance from the former. The demand for house coal for London and the South has in no way increased, and is still very quiet for the time of year. As might be expected, this state of things is hastening on the question of a reduction of wages, notices of which have already been given in more than one quarter. The Miners' Association, however, is in a very flourishing state, with a large accumulation; and it remains to be seen what course the executive will pursue, for the men are sure to hold out strongly against any lowering of the present rate of payment. The Iron Trade continues tolerably good in most branches, there being no falling off so far in the make of pig-iron, whilst the foundries and mills are in full work. The Bessemer steel establishment at Driffield is doing very well, having apparently as many orders in hand for rails as can be executed.

There has been little improvement in the Sheffield Trades, and a decided impetus can only be given to them by a considerable reduction in the price of fuel. The heavy armour plate mills have been working very well, a good deal of what is rolled being for the Continent, whilst Russia promises to be a very good customer when shipments to the Baltic can be made. Ship and boiler plates are in good request, and there is a fair enquiry for railway material, including light rails. The production of Bessemer has increased, the men at Sir J. Brown and Co. (Limited) having resumed work, accepting a reduction of 5 instead of 10 per cent., as at first proposed. Crucible steel goods have not changed very much, and the hands are by no means fully employed. The malleable works have a steady trade, whilst the engine makers are doing very well. There is a little more doing by some of the firms in the better class of table cutlery. The Coal Trade is far from active, but prices have not come down very much, although that they will do so before long is without question.

Between Sheffield and Barnsley the collieries in several instances are working short time, whilst some of them have commenced stacking. A very tender business is being done in house coal with the metropolitan, whilst steam fuel is in great request.

At a meeting of the South Yorkshire Steam Coalowners' Association

tion at Barnsley, on Tuesday, it was agreed to reduce the price of Barnsley steam coal. At the present time both steam and house coal can be purchased at the pits at from 14s. to 15s. per ton—about 7s. per ton less than it was this time last year.

The opening out of a vast coal field in the Barnsley district is being pushed forward most actively. Lying at a depth of 380 yards below the Barnsley coal is the Silstone bed, which has not yet been sunk from one to the other. Now, however, it is being done at three different places, so that a commencement will be made in opening out a field that can only be computed by miles. At Hoyland they have got down to the Lidgett coal, about 200 yards from the Silstone. At Hoyland Common, Messrs. Newton, Chambers and Co. have nearly reached the same bed. The Barrow Hematite, sinking on the estate of Mr. W. Edwards, at Worsborough Park, have made a very good beginning.

**CERTIFICATED COLLIERY MANAGERS.**—The certificated colliery managers, now that the Mines Regulation Act of 1872 has come into operation, find themselves in anything but a fair or pleasant position. They are accountable for everything that takes place not only in the workings of the mines, but also at the surface, although with regard to the latter in many instances they have no control whatever. A movement is now being rapidly extended to have the powers of the managers more accurately and fairly defined, so that they shall only be accountable for accidents caused by persons over whom they have some control, and who are under their instructions. For that purpose a large and influential meeting of certificated managers in the West Riding of Yorkshire was held at the Bull Hotel, Wakefield, on Friday, when what is now termed "The Yorkshire Certificated Colliery Managers' Association" was duly established. Mr. W. Delley, of the Wombwell Main Colliery, was appointed president; Mr. G. Barker, Morley Main Colliery, near Leeds, vice-president; Mr. R. Miller, Stratford Main Colliery, near Barnsley, treasurer; and Mr. J. Muddison, Howden Clough Colliery, Birstal, near Leeds, secretary. Upwards of 40 members were enrolled, and the number was considerably augmented on Wednesday, when a meeting was held at the Royal Hotel, Barnsley, for the purpose of framing the necessary rules. The time for forming the association is most opportune, seeing that the certificated managers will have time to organise and agree upon the steps to be taken to remedy the grievance under which they undoubtedly labour. The working colliery by combination have obtained almost everything they required, and there is certainly no reason why the highest class of colliery officials should be placed in an exceptional position, and made answerable for the delinquencies of a class of men whom they neither appoint nor yet can control.

#### REPORT FROM NORTH AND SOUTH STAFFORDSHIRE.

Feb. 26.—The South Staffordshire Iron Trade continues in an unsettled and unsatisfactory state, and the prospects of immediate improvement do not appear to be very encouraging. Pig-iron is in slack demand, and good samples of all mine hot-blast are being offered as low as 62, 15s. to 74, per ton, the quotations for other qualities being in the usual proportion to the standard. Last week we announced the blowing out of several blast-furnaces, and we understand that the example is likely to be followed in regard to others, the production being pronounced under existing conditions far from remunerative. The demand for cold-blast pig is steeper than for most other descriptions. The finished iron trade is without improvement since our last report. Bars are still quoted 14l., but except in the case of one or two specially favoured houses the quotation is merely nominal, and second-class firms are seeking orders at 11l. 10s. to 12l. per ton. Sheets are exceptionally firmer, owing to circumstances explained in a previous report. Makers of galvanised sheets complain of the slackness in demand, but prices are firm on the basis of 25l. for corrugated roofing, of 24 gauge. Hoops, which are usually in buoyant request at this season of the year on United States account, command just now a very limited enquiry. For shipbuilding plates the demand is, on the whole, steady, and strips and angles are in fairly sustained request. As a rule, the mills and forges of the district are not in operation more than about half-time.

Much attention is being paid just now to the wages question in the iron trade of South Staffordshire. The existing agreement terminates with the present quarter, and it is proposed that the new arrangement shall apply to the North and South Staffordshire and the North of England districts. A private meeting of the committee to whom the arrangements are entrusted will be held shortly at Derby. Staffordshire will be represented by Messrs. G. J. Barker (Chillington Ironworks), Walter Williams (Wedgebury Oak Ironworks), W. S. Roden (Shelton Bar Ironworks), and Capper, Holden, and Annett, ironworkers' delegates. Mr. Daniel Jones, F.G.S., the secretary to the South Staffordshire Ironmasters' Association, will also be in attendance.

The Earl of Dudley is putting up additional puddling-furnaces on the "Casson-Dormoy" principle, at the Round Oak Ironworks, near Brierley Hill, where experimental trials of the new furnace have been made with complete success.

Coal is in very restricted demand, and there is a growing opinion that prices will shortly give way to the extent of 4s. to 5s. per ton from the standard of the Coalmasters' Association, which for some weeks past has been considerably undersold. Best qualities of thick coal are in better demand than most other samples, but the aggregate enquiries are not more than sufficient to maintain the collieries of the district in operation about half-time. Some of the pits, indeed, have not been winning more than three or four days in a fortnight. Ironstone is steady at 11s. for best hematite, and 90s. for best hydrate (including delivery), white ironstone and gubbin of local produce being 25s. and 26s. for raw, and 35s. calcined sample.

Today's quotations on the Birmingham Stock Exchange include:—Ivy House and Northwood Colliery Company (Limited), 24 prem.; Sandwell Park Colliery Company, 240. sellers; Cannock and Huntington Colliery Company (Limited), 12 to 22; Oldbury Carriage, 24 prem.; John Bagnall and Sons (Limited), 94; Chillington Iron, 74. sellers; Muntz's Metal, 23 prem.; and Patent Shaft and Axle, 7 premium.

In North Staffordshire the Iron Trade does not show much improvement, although prices are very fairly maintained. Ironstone and pig-iron are especially flat, and coal is easier in price. The aspect of business generally in this district is not by any means encouraging.

At the Patent Nut and Bolt Company tenth annual meeting, held on Tuesday, it was stated that the company was in a most flourishing condition. The net profits of the company during the year amounted to 48,441l. 9s. 1d. The directors recommended a dividend of 1l. 1s. per share, which, added to the 7s. per share paid *ad interim* last August, would make a total dividend of 10 per cent. for the year. In addition, the directors recommended the augmentation of the reserve fund by 21,000l. Several directors expressed the opinion that the company was now in a very sound position, and that the future prospects were good.

We understand the directors of the London and North-Western Railway Company have accepted the tender of Mr. Woodall, of the Windmill End Boiler Works, near Dudley, for the erection of the new foot-bridge at their station, New-street, Birmingham. The new bridge will be constructed with large W J lattice girders, supported on cast-iron columns, with moulded caps and bases of a classical design. The whole of the work will be carried out under the supervision of Mr. Henry Woodhouse, of Stafford, the company's chief engineer, Mr. T. C. Sharp being the assistant engineer.

**EXPORTS OF COAL.**—By the Monthly Circular of Messrs. Higginson, of Liverpool, we learn that the quantity of coal exported in Jan. was 868,900 tons, against 749,770 tons in the corresponding month of 1873, showing an increase of 119,130 tons. The particulars are—From the Northern Ports, 351,600 tons; Yorkshire, 56,533 tons; London, 3576 tons; Liverpool, 38,672 tons; Severn Ports, 354,006 tons; and Scotch Ports, 64,513 tons. The increase was—Northern Ports, 3687 tons; Yorkshire, 14,350 tons; Severn Ports, 76,972 tons; Scotch Ports, 35,590 tons. The decrease was—London, 2110 tons; Liverpool, 9359 tons.

**SALE OF THE STRATTON STEEL WORKS.**—Under an order from the liquidators, the Stratton Iron and Steel Works, situate at West Hartlepool, were offered for sale by public auction at the Royal Hotel, in that town, by Mr. C. Willman. Mr. Higginson, a director of the late company, left off with a bid of 10,000l. for a property valued by Messrs. Bird and Co. at 50,000l., and the competition continued with great spirit until the hammer fell, the same gentleman being declared the purchaser at 24,600l. There were 32 separate bids altogether, the gentlemen being Mr. Higginson, Mr. Quinby, both of whom were directors of the old company; Mr. Herries, solicitor or the liquidators; Mr. Fawcett, Mr. A. Hutchinson, and Mr. G. T. Pearson. The purchase includes the entire works and the site on which they stand, the forges, mills, and every other appliance being so complete that, as the auctioneer quaintly expressed it, it was only necessary to put the pig in at one end and to come out plate at the other end; no works, even in Staffordshire, could be got going with them, as he also remarked, for their completeness. Mr. Higginson is understood to have paid 50 per cent. in cash, the balance of 19,600l. to be paid in 12 months, and as the property is in good working condition

tion its possession may be entered on almost immediately. The plot of ground adjoining was not put up, the reserve price of which was stated to be 4000l. It should be known that Mr. Higginson's purchase is subject to an arrangement with Mr. Heritage, by which that gentleman has the first refusal.

**WHEEL AGAR AND EAST POOL.**—The great advantage that would result to both mines from an amalgamation is generally acknowledged, but whether such an arrangement can be carried out remains to be seen. There will be no litigation, as both parties have agreed unconditionally to refer all matters in dispute to arbitration. After examining the section, showing the position of the two mines, it is unnecessary to say one word about the policy and interest of the two mines working hard to the boundary in both directions. A large amount of tin ground stands up to the boundary in both directions. The tin ground within the 45 fms. of East Pool engine shaft and the Wheel Agar boundary, taken at 45 yds, equal to 1550 fms., at 40l. per fathom, which is a low estimate, gives 54,000l., without estimating the richest part of the richest bodies of tin discovered in the county for many years. For the satisfaction of the shareholders, Capt. Charles Thomas has inspected East Pool Mine, and in his report states that the tin ground of value adjoining Wheel Agar is extending from the 160 fms. level to the 180 fms. level. The lode generally is large, being about 12 ft. wide, and is worth for the whole width fully 40l. per fm. The 160 and 170 fms. levels have not been driven for some time on account of the large quantity of water coming from the eastern ground. The lode in the 180 fms. level is 10 ft. wide, and is worth about 40l. per fathom; but this end is also suspended, the men being put to rise in the back of the level, in order to hole to a winze just commenced below the 170 fms. level. East Pool is selling over 30 tons of tin per month, more than one-half being raised within 45 fms. of Wheel Agar sett. Provided the dispute be amicably arranged between the two mines, there is no doubt but that East Pool could increase their returns considerably from the eastern part of the mine joining Wheel Agar. Looking at the size, character, and value of the lode at East Pool, and the dip of the tin eastward, Capt. Thomas is of the opinion that Wheel Agar will make a lasting and profitable mine. There are large reserves of tin ground in East Pool, and the mine, on the whole, is looking well.

**MORVAH CONSOLS.**—At the general meeting of shareholders to be held on Thursday next, when Lieut.-Col. T. J. Holland, C.B., will preside, the directors will present a very encouraging report, in addition to the balance-sheet from the commencement of operations to the end of December last, showing an available balance of 293l. 19s. 8d. The present directors—Col. Holland, Mr. James Hammon, and Mr. Henry M. Evans—were elected at the extraordinary meeting in June last. They have carefully examined the books and accounts of the company, and, finding it necessary to have more funds in hand to carry on the operations at the mine, made a call of 10s. per share, which was promptly responded to by all the shareholders excepting three, whose shares have been forfeited, thereby reducing the number on which dividend will have to be paid from 3000 to 2975. A second call of 10s. has been fully met, and they have, consequently, been able to push on with vigour the works at the mine. They have thus carried out as far as possible the intention of the shareholders as expressed at the June meeting. The underground workings in the 16 fms. level have extended upon the course of the Black lode beyond 60 fms. in length, and the sinking under that level to 6 fms. In consequence of mechanical appliances having become necessary, Mr. Hammon, one of the directors, was instructed to proceed to the mine to arrange what might be considered advisable, and the directors are able to state that the progress made at the mine in erecting machinery and stamps is most satisfactory. There are at surface over 1000 sacks of tinstuff already spalled for the stamps, as well as a large reserve in the backs above the 16 fms. level, and there is every reason to anticipate that very shortly the works will be in active operation, yielding substantial profits to all interested as shareholders in the company.

**ENGLEFIELD COLLIERY (HOLYWELL).**—The directors announce that the new engine and machinery for hauling up the main incline have for several weeks been at work, and are in every respect satisfactory. They add that the delay in the delivery of this engine has retarded the development of the colliery.

#### BRITISH OAK TIMBER.

CONTRACT DEPARTMENT, ADMIRALTY, WHITEHALL, S.W.  
18th February, 1874.

**TENDERS** will be RECEIVED on TUESDAY, the 10th March next, until Two o'clock P.M., for—

TWO THOUSAND THREE HUNDRED LOADS OF BRITISH OAK TIMBER, and TWO THOUSAND AND SIXTY BOAT CROOKS.

Their Lordships do not bind themselves to accept the lowest or any tender, and they reserve to themselves the power of accepting any part of a tender. Forms of tender, containing all particulars, may be obtained at this office, on written or personal application. FRANCIS W. ROWSELL, Superintendent of Contracts.

#### TO COALMASTERS, CAPITALISTS, AND OTHERS.

**TO BE OFFERED FOR SALE BY PUBLIC AUCTION.** At the Wellington Hotel, in Leicester, by Messrs. DAVENPORT, GERMAN, AND ALLEN, on Thursday, the 28th day of March, 1874, at Four o'clock in the afternoon precisely, subject to conditions to be then produced, ALL THE MINES, BEDS, AND SEAMS OF COAL AND ALL OTHER MINES AND MINERALS, situate and being within and under all sorts of CLOSURES, PIECES, OR PARCELS OF LAND, forming a compact estate, and containing 179A. 2R. 24P., or thereabouts, situate at IBSTOCK, in the county of LEICESTER.

Also, the right of pre-emption or privilege of purchasing certain specific parts of the surface of the before-mentioned estate (at the price or sum of £1200 net) in order to enable the purchaser of the mines to develop and work the same.

The property is eligibly situated in the immediate neighbourhood of colliery works, being bounded on one side by the lands belonging to the Ibstock Colliery Company, and on the other side by mines leased to the Heather New Colliery, now in course of sinking.

The estate is within a short distance of the Heather Station of the Ashby and Nuneaton Railway.

Plans, with full particulars, may be obtained fourteen days prior to the sale on application to the Auctioneers, Messrs. SMITH AND MAMMATT, or Messrs. FISHER, AND CHURCHILL, Solicitors, all of Ashby de la Zouch. For further particulars and to view the surface, application to be made to Mr. RICHARD THIRLBY, Mr. BENJAMIN THIRLBY, or Mr. JOSEPH CLARKE, all of Ibstock, or of Mr. JOSEPH SHEWEN, Burton-on-Trent.

#### HARTLEPOOL IRONWORKS.

HARTLEPOOL, February 21st, 1874.

**THE UNDERSIGNED BEG TO NOTIFY** that, in consequence of ill-health, Mr. JOHN BOYD has RELINQUISHED their AGENCY, and that they have TRANSFERRED the SAME to Messrs. G. BAILEY TOMS AND CO., 7A, LAURENCE POUNTNEY HILL, CANNON STREET, LONDON, E.C., whom they have appointed SOLE AGENTS, and to whom all applications for Railway Bar Iron should in future be addressed in order to receive prompt attention. THOS. RICHARDSON AND SONS.

#### TO INVESTORS.

**TWO SPLENDID OPPORTUNITIES SUCH AS ARE SELDOM MET WITH**—the one, a COTTON SPINNING CONCERN, ready for IMMEDIATE WORKING, and stocked with the most VALUABLE MACHINERY, principally new—the other, a LARGE IRONMONGERY BUSINESS, at present and for the past 22 years in ACTIVE TRADE, and which has always realised very large profits—ARE NOW OFFERING.

Bona fide investors only are invited to apply for interests therein. Adventitious investors, speculating with the object of receiving promotion money, will not be treated with.

Those only who desire to secure a permanent income on a moderate investment, need apply personally, or address by letter—

MR. HALLAS, PUBLIC ACCOUNTANT, 32, FAULKNER STREET, MANCHESTER.

Who will furnish the fullest information, and to probable investors furnish letters of introduction to view the properties.

#### MINING MACHINERY.

**MESSRS. F. W. MICHELL AND CO.** have FOR SALE several CORNISH PUMPING, STAMPING, and WINDING ENGINES, of different sizes; BOILERS from 6 to 180 tons each; PITWORK of all sizes; CORNISH CRUSHERS, STAMP AXLES; IRON FLAT-RODS; STRAPPING PLATES; and other MATERIALS in general use in Mines, &c. EAST CARN BREA, REDRUTH, CORNWALL.

#### LEAD ORES.

| Date.    | Mines.           | Tons. | Price per ton. | Purchasers.            |
|----------|------------------|-------|----------------|------------------------|
| Feb. 24— | Foxdale          | 100   | £22 3 0        | Sheldon, Bush, & Co.   |
| —        | Willoughby       | 20    | 13 0 0         | Burby Port Company.    |
| 25—      | Bog              | 49    | 13 7 6         | George Burr.           |
| —        | Pennerley        | 75    | 13 10 6        | ditto                  |
| 26—      | Roman Gravels    | 100   | 14 8 0         | Burby Port Company.    |
| —        | ditto            | 50    | 14 19 6        | ditto                  |
| —        | ditto            | 50    | 14 15 6        | ditto                  |
| —        | Bwadrain Consols | 19    | 12 10 0        | George Burr.           |
| —        | ditto            | 10    | 12 10 0        | Adam Eytton.           |
| —        | ditto            | 10    | 12 10 0        | Nevill, Druce, and Co. |
| —        | ditto            | 10    | 12 10 0        | Vivian and Sons.       |
| —        | Bwlch Consols    | 15    | 15 0 0         | Walker, Parker, & Co.  |

OLD TREBURGETT.—The three parcels of silver-lead ore, sold on Feb. 12, weighed off more than the computed weight, realising together 1809l. 18s. 7d.

#### BLLENDE.

| Date.       | Mines. | Tons. | Price per ton. | Purchasers.     |
|-------------|--------|-------|----------------|-----------------|
| Feb. 25—Bog | .....  | 50    | £ 5 0 6        | Dillwyn and Co. |

#### BLACK TIN.

| Date.                | Mines. | Tons c. q. lb. | Price per ton. | Amount.  | Purchasers. |
|----------------------|--------|----------------|----------------|----------|-------------|
| Feb. 18—Pedinan drea | 10     | 0 0 7          | £8 12 6        | £80 12 6 | Carvedras.  |
| 25—Great Wh. Vor.    | 15     | 0 0 18         | —              | 798 13 9 | —           |

#### ARSENIC.

| Date.                | Mine. | Tons c. q. lb. | Price per ton. | Amount. | Purchasers. |
|----------------------|-------|----------------|----------------|---------|-------------|
| Feb. 18—Pedinan drea | 10    | 0 0 7          | £2 8 6         | £28 6 0 | —           |



MONDAY, MARCH 2ND, 1874, AT ONE P.M.

**JOHN THOMAS**, Auctioneer, of Redruth, has been favoured with instructions to **SELL**, at PUBLIC AUCTION (subject to such conditions as will then and there be read), at Boscon Account-house, in the parish of St. Just, Cornwall, on Monday, the 2nd of March, at One P.M.,

LOT I.

### THE WHEEL CALL PART OF THE WHEEL CUNNING UNITED MINES (as a going concern).

The **MACHINERY** and **MATERIALS** on this lot are as follows:—  
 ONE 37 in. cylinder PUMPING ENGINE, 7 ft. stroke, equal beam, with ONE 100 BOILER, of 5 tons and 6 tons respectively.  
 ONE 24 in. cylinder STAMPING ENGINE, 8 ft. stroke, with TWO BOILERS, 16 tons, with tin under the stamps and tin leavings.  
 Two fly wheels; 2 wrought shafts; 2 driving wheels; 32 lifters; 32 heads and bottoms; 32 tongues.  
 ONE 20 in. double acting WINDING ENGINE, with fly wheel, cage, crown and spur wheel, plumb blocks, &c.  
 140 fms. 2 in. round iron rods.  
 3 balance bobs, complete.  
 2 angle bobs.  
 60 fms. 1 in. round iron rods.  
 70 fms. bridge rails.  
 100 fms. tram bars, 2½ by ½.  
 48 ft. 8 in. pumps.  
 20 ft. 7 in. ditto.  
 30 ft. 6 in. ditto.  
 100 fms. 8 and 6 in. wood rods.  
 Rod plates and bolts.  
 18 in. H and top dooppiece.  
 17 in. ditto.  
 16 in. ditto.  
 3 plunger poles, complete.  
 To view the same, and for further particulars, apply to **RICHARD BOYNS, Esq.**, Boswell House, St. Just; or to the Auctioneer, at his offices, West End, Redruth. Dated February 17th, 1874.

LOT II.

### THE HIGHER BOSCON PART OF THE ABOVE MINES (as a going concern).

The **MACHINERY** and **MATERIALS** on this lot are as follow:—  
 ONE 38 in. cylinder PUMPING ENGINE, 9 ft. by 7 ft. stroke, with TWO BOILERS, of 5 tons and 6 tons respectively.  
 ONE 24 in. cylinder STAMPING ENGINE, 8 ft. stroke, with TWO BOILERS, 16 tons, with tin under the stamps and tin leavings.  
 Two fly wheels; 2 wrought shafts; 2 driving wheels; 32 lifters; 32 heads and bottoms; 32 tongues.  
 ONE 20 in. double acting WINDING ENGINE, with fly wheel, cage, crown and spur wheel, plumb blocks, &c.  
 140 fms. 2 in. round iron rods.  
 3 balance bobs, complete.  
 2 angle bobs.  
 60 fms. 1 in. round iron rods.  
 70 fms. bridge rails.  
 100 fms. tram bars, 2½ by ½.  
 48 ft. 8 in. pumps.  
 20 ft. 7 in. ditto.  
 30 ft. 6 in. ditto.  
 100 fms. 8 and 6 in. wood rods.  
 Rod plates and bolts.  
 18 in. H and top dooppiece.  
 17 in. ditto.  
 16 in. ditto.  
 3 plunger poles, complete.  
 To view the same, and for further particulars, apply to **RICHARD BOYNS, Esq.**, Boswell House, St. Just; or to the Auctioneer, at his offices, West End, Redruth. Dated February 17th, 1874.

### WHEEL OSBORNE MINE AND MATERIALS FOR SALE.

**BENJAMIN LIBBY, Auctioneer, &c.**, Camborne (for the Widow of the late Mr. W. G. POLMER), has been favoured with instructions to **SELL**, by PUBLIC AUCTION, on Tuesday, the 3rd March next, at Twelve o'clock, noon, on the Mine, in One Lot, as a going concern, ALL THAT MINE known as

### WHEEL OSBORNE.

Situated near TOWNSEND, in the parish of Crowan, near Camborne, together with the **MACHINERY** and **MATERIALS** thereon, comprising—  
 A 40 in. cylinder PUMPING ENGINE, with ONE BOILER, 10 tons, 12 heads of stamps, worked by a 14 in. engine, with one 8 ton boiler, about 50 fms. of 11 in. pitwork, with two drawing lift bottoms, complete, tin dressing floors, complete, and all the other materials on the mine.  
 The pumping engine is a very superior one, and is in good working order, and the mine being of a most promising character, with complete machinery to develop it fully, and to dress the ore, the lot forms a splendid investment for capitalists, and should be eagerly sought after.  
 To view the same, apply to the Agents on the Mine; and any further particulars may be obtained of the Manager, **Capt. CARKEK, Camborne**; or of the Purser, **W. PAGE CARDNOZ, Esq.**, Camborne.—Dated February 16th, 1874.

WEDNESDAY, MARCH 4.

### EAST PHOENIX MINE, LINKINHORNE.

**MESSRS. WISE AND SHORT** are instructed to **SELL**, by AUCTION, at East Phoenix Mine, in the parish of Linkinhorne, Cornwall, on Wednesday, the 4th of March, 1874, the WHOLE of the

### MACHINERY, MINING MATERIALS, AND PLANT

on the above Mine, comprising—  
 ONE 50 in. cylinder PUMPING ENGINE, 9 ft. stroke, equal beam, with ONE BOILER, crab winch, and first piece main rod.  
 ONE 24 in. cylinder WINDING ENGINE, 8 ft. stroke, drawing cage, and ONE BOILER, complete.  
 1 cast iron balance bob, with lugging rod.  
 56 heads stamps, with stands, frames, lifters, &c.  
 1 60 ft. shears, sheaves, blocks, &c.  
 12 12 in. pumps, with bottoms, complete.  
 40 11 in. ditto ditto  
 10 10 in. ditto ditto  
 50 9 in. ditto ditto  
 60 fms. 12 in. main rod, with strap-ping plates.  
 90 fms. 9 in. ditto ditto  
 Bucket rods, set-offs, &c.  
 1 angle bob, with wrought iron gudgeons, pins, straps, saddles, and brasses.  
 180 fms. 9 in. galvanised iron air pipes.  
 And various other articles too numerous to mention.  
 Catalogues may be obtained of Mr. W. LANGDON, Northumberland Foundry, Lancashire; or of the Auctioneers at Lancaster.  
 For viewing the above, apply on the Mine, which is situate near Upton Cross, and adjoins the highway there.  
 Luncheon at Eleven o'clock. Sale to commence at Twelve precisely.  
 The lots being numerous a punctual attendance is requested.  
 Dated Lancaster, 17th February, 1874.

### GLAMORGANSHIRE—FREEHOLD COAL PROPERTY FOR SALE.

**MESSRS. GRAHAM AND SON** (of Newport) WILL **SELL**, by AUCTION, at the Westgate Hotel, Newport, Monmouthshire, on Friday, 6th March, 1874, at Twelve at noon precisely, all that FREEHOLD FARM AND LANDS, called

### GIL-FACH-FAR-GOED FACH

including COED COVER, situate in the parish of GELLIGAER, in the county of GLAMORGAN, and containing an area of 82A. 0R. 36P., or thereabouts; the surface whereof (except 1A. 3R. 0P., taken by the Rhymney Railway) is now in the occupation of **GEORGE BATTERS, Esq.**, and **MR. DAVID WILLIAMS**, at the respective annual rents of £44 and £28, and also a way leave of one penny per ton on all coal passing through the property.  
 This property is intersected by the Rhymney Railway, and is thus connected with the shipping port of Cardiff (16½ miles distant) and Rhymney, and also the important iron-making districts of Tredegar, Sirhowy, Ebbw Vale, Nant-y-Glo, and Blaenavon. By means of the Bargoed Rhymney Railway and its connections access is given to Dowlais and Merthyr.  
 This property contains all the seams of coal of the Merthyr Tydfil district. The Mynyddylwyn seam has been nearly worked out under the property, but that well known as the Bithrid seam, it is believed, will be found there at a depth of not more than 250 yards, as it is now being extensively worked in the Rhymney, the Rhymney Bargoed, and Taff Bargoed Valleys.  
 This seam, at the Darran Pit, two miles north of this property, proves from 3 ft. 5 in. to 3 ft. 9 in. thick, in one solid block of coal, with excellent rock top. At the new Cefn Bithrid Pit it proves about the same thickness, and equally good in quality.  
 The Bithrid coal is highly bituminous, a good coking coal, and in great demand for iron-making.  
 The steam coals, as worked by the Dowlais Iron Company at the Fochriw Pits, and by the Powell's Duffryn Colliery Company (Limited), at their New Tredegar Pits, will doubtless be found under this property at a depth of from 500 to 600 yards.  
 The present sale offers a rare opportunity of buying a freehold coal property, such as very seldom occurs.  
 Printed conditions of sale, with plan of the property, &c., and all further particulars, may be had on and after Monday, 16th February, 1874, on application to the Auctioneers, at Newport: **CHARLES HENRY JAMES, Esq.**, Mining Engineer, 8, Courtland Terrace, Merthyr Tydfil; or to C. F. and G. JAMES, Solicitors, Merthyr Tydfil.—February 9, 1874.

### TO IRONMASTERS, COLLIERY OWNERS, AND OTHERS.

### CARNE PARK COLLIERY.

**MR. W. P. STEPHENSON** (Auctioneer) WILL **SELL**, by AUCTION (unless previously disposed of by Private Contract), at the Royal Hotel, Cardiff, on Wednesday, the 11th March, 1874, at Two o'clock P.M.,

### THE CARNE PARK COLLIERY,

Situate near to the Aberdare Junction Station of the Taff Vale Railway, about 16 miles from Cardiff, and three miles from the Quaker's Yard Junction of the Great Western Railway.  
 The colliery is connected with the Taff Vale Railway by means of convenient sidings, and from its situation the tolls for coal to the ironworks of Aberdare and Merthyr are much below those of the Rhondda Valley.  
 The extent of property is about 320 acres, and is held under an agreement for lease from Dr. Nicholl Carne for 42 years, 36 of which are unexpired. The royalty is 6d. per ton, of 2500 tons, and the dead rent £100 per annum.  
 The coal crops out upon the property, and is wrought by a day level, which drains a very considerable portion of the royalty, and the remainder can be won and drained level free by means of another opening.  
 The coal is of the same description as that suggested by Mr. Derry, the late Government Inspector of Coal Shipments, for use in conjunction with the drier anthracite coals of the district.  
 There is a band of fire-clay, from which bricks could be made. The level is capable of producing 400 tons per day, and this can be readily increased at an outlay of no great amount.  
 The steam coal measures underlie the property, but are not included in the taking.  
 Application to be made to Mr. W. P. STEPHENSON, Auctioneer, 21, Queen-street, Cardiff, who will give orders to view the premises.

### In the Court of the Vice-Warden of the Stannaries. Stannaries of Cornwall.

**IN the MATTER of the COMPANIES ACTS, 1862 and 1867, and of the ST. BLAZEY CONSOLS TIN MINE (LIMITED).**—The Vice-Warden has, by an Order made in the above Matter, bearing date the 25th day of February instant, appointed **MR. JOHN HENRY HAMLEY**, of Truro, within the said Stannaries, an Officer of the said Court, to be OFFICIAL LIQUIDATOR of the above-named company.  
**FREDERICK MARSHALL, Registrar.**  
 Dated Registrar's Office, Truro, February 25th, 1874.

### In the Court of the Vice-Warden of the Stannaries. Stannaries of Cornwall.

**IN the MATTER of the COMPANIES ACTS, 1862 and 1867, and of the ST. BLAZEY CONSOLS TIN MINE (LIMITED).**—Notice is hereby given, that ALL CREDITORS of the ABOVE-NAMED COMPANY are required, on or before Thursday, the 12th day of March next, to SEND IN THEIR NAMES AND ADDRESSES, and the AMOUNTS and PARTICULARS of their SEVERAL CLAIMS, to **MR. JOHN HENRY HAMLEY**, the Official Liquidator of the said company, at the Stannaries Court Office, in Truro, within the said Stannaries.  
**FREDERICK MARSHALL, Registrar.**  
 Dated Registrar's Office, Truro, February 25th, 1874.

### In the Court of the Vice-Warden of the Stannaries. Stannaries of Cornwall.

**IN the MATTER of the COMPANIES ACTS, 1862 and 1867, and of the ST. BLAZEY CONSOLS TIN MINE (LIMITED).**—By an Order made by His Honor the Vice-Warden of the Stannaries, in the said Matter, dated the 25th day of February instant, on the petition of William Harvey, Henry Whitford, William West, William John Rawlings, William Husband, Francis Harvey, and Nicholas James West (carrying on business at Hayle, within the said Stannaries, as General Merchants, under the style or firm of "Harvey and Co."), creditors of the said company, IT WAS ORDERED that the ST. BLAZEY CONSOLS TIN MINE (LIMITED) should be WOUND-UP by this Court under the provisions of the Companies Act, 1862.  
**HODGE, HOCKIN, AND MARRACK, Truro.**  
 (Solicitors for the Petitioners.)  
 Dated Registrar's Office, Truro, February 25th, 1874.

### In the Court of the Vice-Warden of the Stannaries. Stannaries of Cornwall.

**IN the MATTER of the COMPANIES ACT, 1862, and of the EAST NEW WHEEL LOVELL MINING COMPANY.**—The Vice-Warden has, by an Order made in the above Matter, bearing date the 20th day of February instant, appointed **CHARLES WILLIAM CLINTON**, of Truro, within the said Stannaries, an Officer of the said Court, to be OFFICIAL LIQUIDATOR of the above-named company.  
**FREDERICK MARSHALL, Registrar.**  
 Dated Registrar's Office, Truro, 20th February, 1874.

### In the Court of the Vice-Warden of the Stannaries. Stannaries of Cornwall.

**IN the MATTER of the COMPANIES ACT, 1862, and of the EAST NEW WHEEL LOVELL MINING COMPANY.**—Notice is hereby given, that ALL CREDITORS of the ABOVE-NAMED COMPANY are required, on or before Wednesday, the 11th day of March next, to SEND IN THEIR NAMES AND ADDRESSES, and the AMOUNTS and PARTICULARS of their SEVERAL CLAIMS on the said company, to **MR. CHARLES WILLIAM CLINTON**, the Official Liquidator of the above-named company, at the Stannaries Court Office, in Truro.  
**FREDERICK MARSHALL, Registrar.**  
 Dated Registrar's Office, Truro, 25th February, 1874.

### In the Court of the Vice-Warden of the Stannaries. Stannaries of Cornwall.

**IN the MATTER of the COMPANIES ACTS, 1862 and 1867, and of WHEEL HENRY TIN AND COPPER MINING COMPANY (LIMITED).**—ALL CREDITORS or CLAIMANTS of the ABOVE-NAMED COMPANY, who have not received notice from the Registrar of the said Court that their claims have been already admitted, are hereby required to COME IN AND PROVE THEIR SEVERAL DEBTS OR CLAIMS at the Registrar's Office, Truro, on Wednesday, the 11th day of March next, at Eleven o'clock in the forenoon, or, in default thereof, they WILL BE EXCLUDED FROM THE BENEFIT OF ANY DISTRIBUTION made before such proof. And for the purpose of such proof they are either to attend in person or by their solicitors or competent agents, or (unless such attendance be required by the Registrar's summons) they are to send affidavits being sworn either before some Commissioner of the said Court, or before any Commissioner of one of the Superior Courts lawfully authorised to take and receive affidavits and affirmations.  
**FREDERICK MARSHALL, Registrar.**  
 Dated Truro, the 24th day of February, 1874.

### In the Court of the Vice-Warden of the Stannaries. Stannaries of Cornwall.

**IN the MATTER of the COMPANIES ACT, 1862, and of the EAST NEW WHEEL LOVELL MINING COMPANY.**—By an Order made by His Honor the Vice-Warden of the Stannaries in the said Matter, dated the 20th day of February instant, on the Petition of William Harvey, Henry Whitford, William West, William John Rawlings, William Husband, Francis Harvey, and Nicholas James West, carrying on business at Hayle, within the said Stannaries, as General Merchants, under the style or firm of "Harvey and Co.", creditors of the said company, IT WAS ORDERED that the EAST NEW WHEEL LOVELL MINING COMPANY should be WOUND-UP by this Court under the provisions of the Companies Act, 1862.  
**HODGE, HOCKIN, AND MARRACK**  
 (Solicitors for the said Petitioners.)  
 Dated Registrar's Office, Truro, February 20, 1874.

### In the Court of the Vice-Warden of the Stannaries. Stannaries of Cornwall.

**IN the MATTER of the COMPANIES ACTS, 1862, and of the PERRAN CONSOLS MINING COMPANY.**—Notice is hereby given, that a PETITION for the WINDING-UP of the ABOVE-NAMED COMPANY by the Court was presented to the Vice-Warden of the Stannaries, by Thomas Jenkin, of St. Ives, within the said Stannaries, merchant, a creditor of the said company, and that the said petition is directed to be heard before the Vice-Warden, at 3, Onslow-square, Brompton, in the county of Middlesex, on Monday, the 8th day of March next, at Twelve o'clock at noon.  
 Any contributory or creditor of the company may appear at the hearing and oppose the same, provided he has given at least two clear days' notice to the petitioner, his solicitor, or his agents, of his intention to do so, such notice to be forthwith forwarded to P. P. Smith, Esq., Secretary of the Vice-Warden, Truro.  
 Every such contributory or creditor is entitled to a copy of the petition and affidavit verifying the same, from the petitioner, his solicitor, or his agents, within 24 hours after requiring the same, on payment of the regulated charge per folio.  
 Affidavits intended to be used at the hearing, in opposition to the petition, must be filed at the Registrar's Office, Truro, on or before the 5th day of March next, and notice thereof must, at the same time, be given to the petitioner, his solicitors, or his agents.  
**ROBERT MACLEANE PAUL, Truro, Cornwall**  
 (Solicitor for the Petitioner.)  
**GREGORY, ROWCLIFFES, AND RAWLE, 1, Bedford-row, London**  
 (Agents of the said Solicitor.)  
 Dated Truro, 21st February, 1874.

### In the Court of the Vice-Warden of the Stannaries. Stannaries of Cornwall.

**IN the MATTER of the COMPANIES ACTS, 1862 and 1867, and of the OKEL TOR MINE COMPANY.**—TO BE SOLD, BY PUBLIC AUCTION, on Tuesday and Wednesday, the 17th and 18th days of March, 1874, at Eleven o'clock in the forenoon precisely on each day, at the Okel Tor Mine, in the parish of Calstock, within the said Stannaries, under the direction of the Registrar of the Court, in lots, the WHOLE of the VALUABLE and EXTENSIVE MINING PLANT, MACHINERY, MATERIALS, AND EFFECTS, belonging to the company, and now being within and upon the said mine, and comprising, amongst numerous other effects,  
 50 in. cylinder PUMPING ENGINE, 10 ft. stroke.  
 22 in. double stamping BEAM ENGINE, 9 ft. stroke.  
 20 in. cylinder WINDING ENGINE, 5 ft. stroke.  
 ONE 11 ton BOILER.  
 TWO 10 ton BOILERS.

Powerful Cornish crusher, with driving gear, &c., complete, eight arm capstan, oak axle, with span-beam, &c., 4 in. capstan, rope, shears, and pulleys, balance bob, 130 fms. 1 in. steel wire-rope, two 12 heads stamps axes, one six heads stamps with frames, lifters, heads, &c., complete, 123 fms. of pitwork, consisting of three 12 in. plunger-lifts, one 15 in. plunger-pole and ease-working barrel, &c., 9 in. drawing gear, winding gear, four 12 ft. handle wheels, two revolving calenders, 20 bobbles, six tram wagons, three kibbles, several tons of bridge and other tram rails and saddles, a quantity of wood sheds, about 1000 fms. of launders, quantity of tin kieves and dressing tools, lot of miners' chests, two small shaft boxes, 80 fms. 1½ main rods, hammered iron rod plates, lot of ½ in. and ¾ in. chain, a quantity of new wrought iron, screw stocks, plates, and taps, smiths' tools, two lifting jacks, two 3 in. screws, carpenter's bench, three sets of scales and weights, mine bell, and the office furniture.  
 The mine having been worked only a limited number of years the machinery and materials have had but little wear, and are, consequently, in excellent condition, and, it being situated on the banks of the River Tamar, unusual facilities for the removal of the materials by water are offered.  
 For further particulars apply to the official liquidator, Mr. CHARLES LEE NICHOLS, No. 1, Gresham-buildings, Basinghall street, London; Messrs. CARR, BANNISTER, DAVIDSON, and MORRIS, Solicitors, No. 70, Basinghall-street, London; or to Mr. R. M. PAUL, Solicitor, Truro.  
 Dated Feb. 23, 1874.

**FOR SALE, in BELGIUM, the FOLLOWING CONTRACTORS' PLANT:—FIVE LOCOMOTIVES, FOUR LOCOMOBILES, from 12 to 15 horse power, in good condition; FIVE of Gwynne's PUMPS; 50 7-ton TRUCKS, for earthwork and ballasting; 120 TILTING TRUCKS, of State gauge, and holding about 130 cubic feet; harness, traces, &c.; sundry tools and implements. For prices, &c., apply to E. BELLEROCHE, 10, London-street, City, E.C.**

### FORTESCUE TIN MINE, ST. STEPHEN'S, CORNWALL.

About Three Miles from the Grampond Road Station.  
**VALUABLE MINING PROPERTY AND MATERIALS FOR SALE,**  
 As a going concern, under a Bill of Sale, by order of the Mortgagee.

**MR. W. NICHOLL**, Auctioneer, Redruth, has received instructions to **SELL**, BY PUBLIC AUCTION, at the Account house of Fortescue Tin Mine, St. Stephen's, Cornwall, on Tuesday, March 31, 1874, at Twelve o'clock precisely, the undermentioned nearly NEW and SUPERIOR

### MINE MACHINERY AND MATERIALS, viz:—

ONE new 34 in. double rotary PUMPING and STAMPING ENGINE, with 11 ton BOILER, 2 fly-wheels, 11 tons each, complete.  
 24 stamp lifters, with 4 spare ones.  
 150 fms. iron rods.  
 Stands and pulleys.  
 Balance bobs.  
 50 fms. 9 in. pumps.  
 Dooppieces and H pieces.  
 2 shears over shaft.  
 Capstan.  
 2 horse whims.  
 Wire ropes.  
 Kibbles.  
 Tramroad and wagons.  
 Double crank winch.  
 Iron blocks and chains.  
 A quantity of tin on the dressing-floors, and other effects on the said mine.  
 The auctioneer begs to call the attention of capitalists, mine agents, and others to the above materials, which are nearly new. The whole will be offered in One Lot, and, if not thus disposed of, will be put up in lots, to suit the convenience of purchasers. Refreshments on the mine.  
 For further particulars apply to F. W. SNELL, Esq., Solicitor, 1, George street, Mansion House, London; or to the Auctioneer, Fore-street, Redruth.

### GENERAL BRAZILIAN MINING COMPANY (LIMITED).

**THE TRUSTEES for the DEBENTURE STOCKHOLDERS in the GENERAL BRAZILIAN MINING COMPANY (Limited), are PREPARED to RECEIVE PROPOSALS for the PURCHASE of ALL or EITHER of the MINING PROPERTIES of the company, situate in the Province of MINAS GERAES, BRAZIL, together with the HOUSES, MILLS, and other BUILDINGS situate thereon or belonging thereto. The estates comprise THREE SEPARATE MINING ESTATES respectively, each capable of being worked separately.**  
 All three properties have been considerably wrought, and are known to have yielded large quantities of gold until the works were compulsorily suspended, owing to the difficulties experienced in draining the mines with the imperfect appliances then available. An audit has recently been driven at "Santa Anna," and also at "Itabira," almost to the point where the lodes are expected to be met with, rendering these estates very eligible investments for persons desirous of purchasing mining property.  
 The Concicao Estate has a great reputation, having yielded large quantities of gold, and although equally eligible as a mining property, would require a larger outlay than either the Santa Anna or Itabira Mines before remunerative returns could be expected. In addition to the three mining properties, the company have for disposal a house in the City of Itabira, which may be purchased either with these properties, or separately.  
 Maps and plans of the properties, together with reports of mining engineers thereon, may be seen at the offices of the trustees, 58, London Wall, London, E.C., from whom all particulars and information necessary for investigation can be obtained, and, if desired, inspection of the mines can be obtained on application to Capt. W. L. DAVEY, in charge of the property.  
 Offers for the purchase of the mines may be addressed to the "Trustees" at the above address at any time up to the first day of June next, after which date they will proceed to decide upon all offers then received.  
 Dated this twenty-fifth day of February, 1874.  
 By order of the Trustees of the Debenture Stockholders.

### TO COLLIERY PROPRIETORS, AND OTHERS.

### SALE OF VALUABLE COAL MINES IN NORTH WALES. CROSS TREE FARM, EWLOE, HAWARDEN.

On Saturday, the 21st March next, at Two o'clock P.M. for Three o'clock prompt, at the Queen's Hotel, Chester.

**ALL THAT VALUABLE FARM, called CROSS TREE FARM, with the MESSUAGE, OUTBUILDINGS, and several FIELDS or CLOSES of LAND thereon belonging, situate in the township of EWLOE, in the parish of HAWARDEN, in the county of FLINT, bounded by the public highway from Buckley to Queen's Ferry, and by lands belonging to the Right Honourable William Ewart Gladstone, containing together 32A. 6R. 13P. statute measure or thereabouts, and now in the occupation of Mr. WILLIAM BROWN, as yearly tenant thereof; together with all the MINES of COAL, CANNEL, FIRE-CLAY, IRON-STONE, and other MINERALS under the above-mentioned lands and half the adjoining roads.**

The principal mines are the GLYNNE COAL, underneath which is a very valuable mine of fire-clay, worked in conjunction therewith; and the celebrated PREMIER COAL, extensively worked by the Aston Hall Colliery Company (Limited) under the adjoining estate, where the Glynne coal is found to be 3 ft. thick, and the Premier coal 4 ft. 6 in. thick. This property is very advantageously situated, and it is believed the mines will be found to be free from water.  
 Tenure freehold of inheritance.  
 For further particulars, apply to Mr. J. W. DAVIDSON, Accountant; or to Messrs. RICHARDSON, OLIVER JONES, and BILLSON, Solicitors, 10, Cook-street, Liverpool.

### COAL AND IRONSTONE PROPERTY.

**ON SALE, a very valuable PROPERTY, consisting of FIFTY-SIX ACRES of COALS and IRON ORE, situated at SELSTON, NOTTINGHAMSHIRE, and within 1400 yards of a part of the Great Northern Railway now being constructed, and within 1700 yards of the Midland Railway, and within 300 yards of the Butterley Company's tramway.**  
 To any capitalist or company disposed to undertake the development of this property on unusually favourable terms can be had, and it is believed that the outlay would not be large.  
 An authentic report can be furnished on application to **JOHN BERRIE, Esq.**, Culcheth Hall, Newton Heath, near Manchester.

**FOR SALE, an excellent 60-horse high-pressure HORIZONTAL STEAM ENGINE, 30 in. cylinder, 5 ft. stroke, with TWO spherical-ended cylindrical BOILERS, 42 ft. long and 5 ft. diameter. Also TWO SETS of 18 in. PIT PUMPS, about 200 ft. long each, with double bell crank, connecting rod, and spears and gear complete. A 10 in. double action FORCE PUMP is attached to the engine, which can be detached, or otherwise.**  
 Application to be made to **THOMAS HAWKLEY, Esq., C.E.**, 30, Great George-street, Westminster; or to Mr. LOAM, at the Waterworks Office, Nottingham.  
**SAML. MAPLES, Clerk to the Company.**  
**N.B.**—The articles above mentioned have been used for sinking a large shaft, and are peculiarly well adapted for COLLIERY and other MINING PURPOSES.

**FOR SALE, ready for immediate delivery, ONE NEW STEAM DONKEY FEED PUMP, inverted cylinder 10 in. diameter by 12 in. stroke, working in a chamber brass lined, valve brass.**  
 For price and particulars, apply to **PEASCOCK and TAYLOR, Engineers, &c.**, 44, Dean-street, Newcastle-on-Tyne.

### RARE OPPORTUNITY FOR MAKING A FORTUNE.

**TO BE SOLD, PART or ENTIRE (former preferred) of a COLLIERY ROYALTY in NORTH WALES, bordering on the London and North-Western Railway, and close to a shipping port. There are several shafts partially sunk, some requiring to be sunk still deeper, but operations stopped for want of capital. There are four seams of good house and steam coal proved in an area upwards of 400 acres of surface. Holder will sell the entire, including the present plant (not sufficiently powerful for sinking further) for £4000, but would prefer taking a PARTNER, who would advance the necessary capital for half profits, which in the present state of the coal trade are almost fabulous.**  
 Address, "Vulcan," care of Mr. Watson, 15, Fenwick-street, Liverpool.

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**TO BE SOLD, PART or ENTIRE (former preferred) of a COLLIERY ROYALTY, of about 170 acres, in NORTH WALES. The pit is sunk 40 yards deep to the seam containing the best description of Cannel. There are six other seams of good coal (the first being King Coal, only 14 yards under it) known to be beneath this seam. Its situation being half a mile from a railway station, and also admirably adapted for land sale, close to excellent roads, the working expenses, royalty, rent, and outlay small (for probable get in a few weeks of 400 tons daily at an almost fabulous profit, render the present undertaking one well worthy the immediate attention of capitalists, coal dealers, gas manufacturers, or colliery proprietors.**  
 Address, "Q. E. D.," care of Mr. Watson, 15, Fenwick-street, Liverpool.

### LEAD MINES IN THE COUNTIES OF DURHAM AND NORTHUMBERLAND.

**TO BE LET, ON LEASE, with immediate possession, the HUNSTANWORTH and NEWBIGGIN ROYALTIES the former about 3554 acres and the latter 200 acres, or thereabouts.**  
 The Hunstanworth Royalty adjoins the celebrated W.B. Lead Mines, and has for many years yielded large quantities of lead ore, and much of the ground is undeveloped.  
 For particulars, apply to **JOSEPH DODDS, Esq., M.P.**, No. 4, Spring-gardens, Charing-cross, London, S.W.; or Stockton-on-Tees; or Mr. THOMAS J. BEWICK, C.E., No. 4, Queen-square, London, S.W.; and Haydon Bridge, Northumberland.

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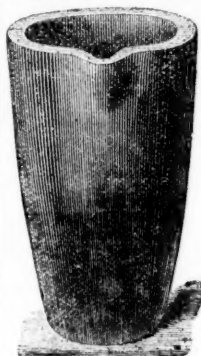
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Extract from Mr. BAXTER'S Speech in the House of Commons, May 31st, 1870:—

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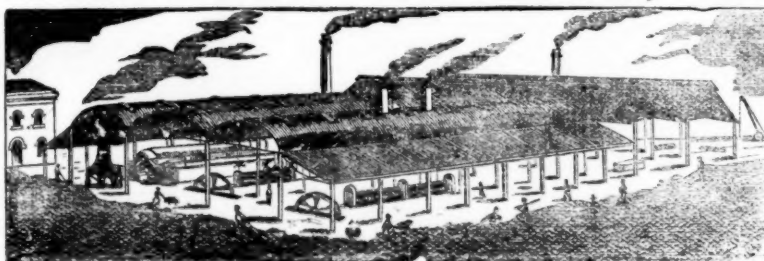
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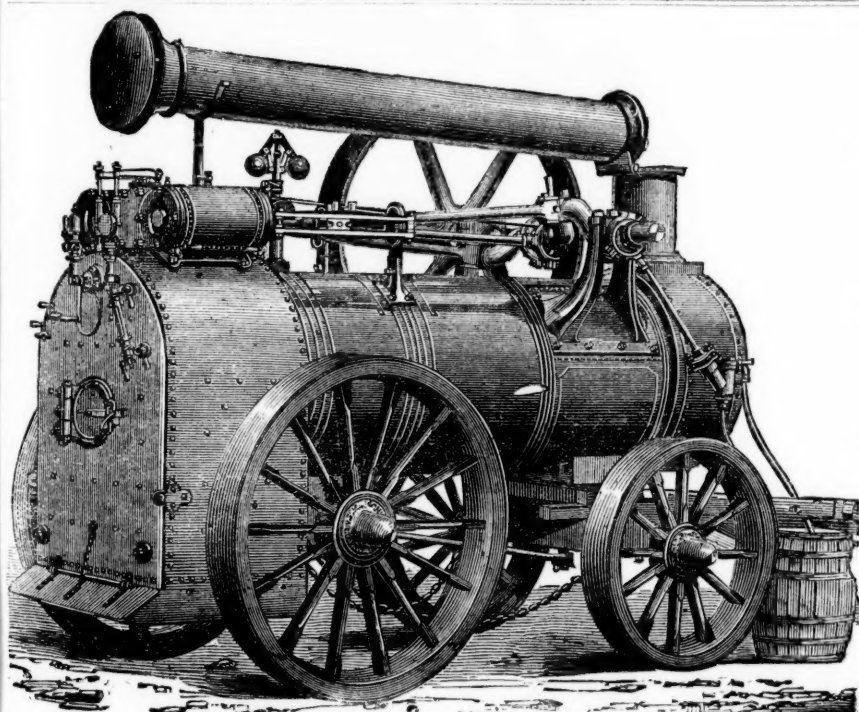
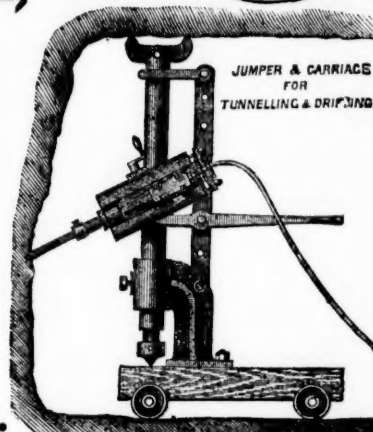
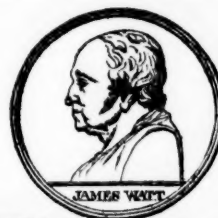
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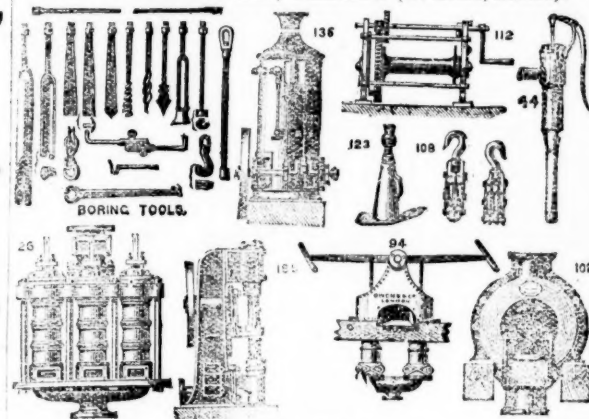
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## THE MINING SHARE LIST.

| BRITISH DIVIDEND MINES. |  |          |          |           |             |            |            |  |  |
|-------------------------|--|----------|----------|-----------|-------------|------------|------------|--|--|
| Shares.                 | Mines.   | Prind.   | Last Pr. | Clos. Pr. | Total divs. | Per share. | Last paid  |  |  |
| 1500                    | Alderley Edge, c, Cheshire                     | 10 0 0   | —        | —         | 11 16 8     | 0 5 0      | Oct. 1873  |  |  |
| 30000                   | All-y-Crib, c, Talybont                        | 2 0 0    | —        | —         | 0 6 0       | 0 0 0      | Feb. 1873  |  |  |
| 50000                   | Bampfylde, c, Devon                            | 1 0 0    | —        | —         | 0 2 0       | 0 0 0      | June 1873  |  |  |
| 18000                   | Blaen Caelan, c, Cardigan* (24 sh.)            | 3 0 0    | —        | —         | 0 10 0      | 0 0 0      | Oct. 1871  |  |  |
| 200                     | Boscawell Downs, c, St. Just                   | 116 5 0  | 65       | 1 1 1/2   | 619 15 0    | 5 0 0      | Oct. 1871  |  |  |
| 200                     | Botalack, c, St. Just                          | 116 5 0  | 65       | 1 1 1/2   | 110 0 0     | 2 0 0      | Jan. 1872  |  |  |
| 5000                    | Brookwood, c, Buckfastleigh                    | 1 16 0   | —        | —         | 2 14 6      | 0 0 0      | Nov. 1873  |  |  |
| 3348                    | Cargill, c, Newlyn                             | 4 16 11  | 1        | 1/4 1/2   | 4 16 3      | 0 12 6     | Oct. 1872  |  |  |
| 6400                    | Cashwell, c, Cumberland                        | 2 10 0   | —        | —         | 1 4 0       | 0 4 0      | Aug. 1872  |  |  |
| 7500                    | Castle-an-Dinas, c, St. Columb                 | 2 0 0    | —        | —         | 0 10 0      | 0 0 0      | July 1873  |  |  |
| 1000                    | Carn Brea, c, Illogan                          | 35 0 0   | 45       | 30 35     | 308 0 0     | 1 0 0      | Feb. 1874  |  |  |
| 6000                    | Cath. & June, c, Penrhynendendrach             | 5 0 0    | —        | —         | 0 7 6       | 0 7 6      | June 1873  |  |  |
| 2450                    | Cook's Kitchen, c, Illogan                     | 20 4 9   | 9        | 4 5       | 11 17 0     | 0 7 6      | Jan. 1873  |  |  |
| 10240                   | Devon Gt. Consols, c, Tavistock                | 0 12 0   | 1 1/2    | 1 1/2     | 116 10 0    | 0 12 0     | May 1872   |  |  |
| 4296                    | Doleath, c, Camborne                           | 10 14 10 | 46       | 40 41     | 104 4 0     | 0 12 6     | Jan. 1874  |  |  |
| 10000                   | East Haleswiden, c, Sancerre                   | 1 0 0    | 1 1/2    | 1 1/2     | 0 2 11 0    | 0 5 0      | Feb. 1874  |  |  |
| 6144                    | East Caradon, c, St. Cleer                     | 2 14 6   | 3 1/2    | 3 1/2     | 14 19 0     | 0 2 0      | Oct. 1872  |  |  |
| 300                     | East Darren, c, Cardiganshire                  | 32 0 0   | —        | —         | 218 10 0    | 1 0 0      | Jan. 1874  |  |  |
| 6400                    | East Pool, c, Illogan                          | 0 9 9    | 7 1/2    | 6 1/2     | 13 11 3     | 0 2 6      | May 1873   |  |  |
| 5000                    | Exmouth, c, Christow                           | 0 7 6    | —        | —         | 0 1 0       | 0 1 0      | May 1873   |  |  |
| 5000                    | Foxdale, c, Isle of Man                        | 25 0 0   | —        | —         | 0 10 0      | 0 10 0     | Sept. 1873 |  |  |
| 40000                   | Glasgow Carr, c, 130,000 £1 p., 10,000 15s. p. | 1 1/2    | 1 1/2    | 1 1/2     | 16 11 0     | 0 10 0     | Oct. 1873  |  |  |
| 15000                   | Great Laxey, c, Isle of Man                    | 13 1/2   | 11 1/2   | 12        | 0 1 0       | 0 1 0      | Sept. 1873 |  |  |
| 25000                   | Great West Van, c, Cardigan                    | 2 0 0    | —        | —         | 0 1 0       | 0 1 0      | Sept. 1873 |  |  |
| 4000                    | Great Wheel Vn, c, Helston                     | 40 5 0   | 1 1/2    | 3 1/4     | 15 19 0     | 0 2 6      | June 1872  |  |  |
| 6400                    | Green Hurth, c, Durham                         | 0 6 0    | —        | —         | 1 4 0       | 0 4 0      | Nov. 1873  |  |  |
| 1024                    | Herod's Foot, c, near Liskeard                 | 8 10 0   | 4 1/2    | 4 1/2     | 62 5 0      | 0 15 0     | Oct. 1872  |  |  |
| 18000                   | Hingham Downs, c, Calstock* (41 sh.)           | —        | 1 1/2    | 1 1/2     | 4 3 0       | 0 5 0      | Dec. 1872  |  |  |
| 25000                   | Killalee, c, Tipperary                         | 1 0 0    | —        | —         | 0 3 11 0    | 0 6 0      | Mar. 1873  |  |  |
| 400                     | Lisburne, c, Cardiganshire                     | 18 15 0  | —        | —         | 561 10 0    | 1 0 0      | Jan. 1874  |  |  |
| 5120                    | Lovell, c, Wendron                             | 0 10 0   | —        | —         | 0 17 6      | 0 1 6      | Jan. 1874  |  |  |
| 9000                    | Minera Mining Co., c, Wrexham                  | 5 0 0    | 32 1/2   | 30 32 1/2 | 63 5 0      | 0 6 0      | Feb. 1873  |  |  |
| 5000                    | Mining Co. of Ireland, c, c, c                 | 2 0 0    | 6 1/2    | 6 1/2     | 0 12 6      | 0 2 6      | Jan. 1874  |  |  |
| 12000                   | North Hendre, c, Wales                         | 10 17 0  | —        | —         | 4 13 0      | 0 12 0     | Sept. 1873 |  |  |
| 27000                   | Old Treburt, c, ordinary shares                | 1 0 0    | 1 1/2    | 3 1/4     | 0 9 9       | 0 9 9      | Feb. 1873  |  |  |
| 5000                    | Old Treburt, c, 10 per cent. pref.             | 0 10 0   | —        | —         | 0 1 9       | 0 1 9      | Feb. 1873  |  |  |
| 5000                    | Pedra-an-dren, c, Redruth                      | 8 2 0    | 2 1/2    | 1 1/2     | 0 5 0       | 0 5 0      | Nov. 1871  |  |  |
| 5000                    | Penhalls, c, St. Agnes                         | 3 0 0    | 2 1/2    | 2 1/2     | 3 3 0       | 0 2 0      | Jan. 1874  |  |  |
| 50000                   | Penrith, c, Gwennap                            | 2 0 0    | 3 1/2    | 3 1/2     | 0 1 0       | 0 1 0      | Nov. 1873  |  |  |
| 6000                    | Phoenix, c, Linkinhorne                        | 4 3 4    | 5        | 5 1/2     | 39 19 0     | 0 4 0      | Nov. 1872  |  |  |
| 1772                    | Pollero, c, St. Agnes                          | 15 0 0   | —        | —         | 1 12 0      | 0 5 0      | Mar. 1872  |  |  |
| 18000                   | Prince Patrick, c, Holywell                    | 1 0 0    | 6 1/2    | 4 6       | 104 12 6    | 0 10 0     | Sept. 1872 |  |  |
| 1120                    | Providence, c, Lelant (last call Dec. 73)      | 12 15 7  | 16 1/2   | 15 1/2    | 3 5 0       | 0 8 6      | Dec. 1873  |  |  |
| 12000                   | Roman Gravel, c, Salop                         | 1 0 0    | —        | —         | 0 1 0       | 0 1 0      | Feb. 1872  |  |  |
| 10000                   | Shelton, c, St. Austell                        | 1 0 0    | —        | —         | 0 1 1       | 0 1 1      | Sept. 1872 |  |  |
| 6000                    | Shimmed Dressing, c, Calstock                  | 1 0 0    | —        | —         | 0 10 0      | 0 1 0      | Jan. 1874  |  |  |
| 512                     | South Caradon, c, St. Cleer                    | 1 5 0    | 82 1/2   | 40 60     | 0 10 0      | 0 2 6      | Jan. 1872  |  |  |
| 5000                    | South Carr Brea, c, Illogan                    | 1 17 6   | 2 1/2    | 2 1/2     | 1 1 6       | 0 1 6      | Nov. 1872  |  |  |
| 6000                    | South Darren, c, Cardigan                      | 3 6 6    | —        | —         | 17 5 0      | 0 10 0     | June 1872  |  |  |
| 242                     | Sperme Moor, c, St. Just                       | 38 17 9  | —        | —         | 0 9 9       | 0 4 0      | Nov. 1871  |  |  |
| 8771                    | St. Just Amalgamated, c                        | 3 10 0   | —        | —         | 0 3 0       | 0 3 0      | Feb. 1873  |  |  |
| 12000                   | Tankerville, c, Salop                          | 6 0 0    | 9 1/2    | 8 1/2     | 46 18 6     | 0 15 0     | Feb. 1874  |  |  |
| 25000                   | Terras, c, St. Austell                         | 1 0 0    | 34       | 25 30     | 9 11 0      | 0 10 0     | Nov. 1872  |  |  |
| 6000                    | Tincoft, c, Pool, Illogan                      | 5 15 0   | 4 1/2    | 4 5       | 11 17 0     | 0 15 0     | Dec. 1873  |  |  |
| 4000                    | Trumpler Consols, c, Helston                   | 4 5 0    | 35       | 30 35     | 52 10 0     | 0 5 0      | June 1873  |  |  |
| 15000                   | Van, c, Llanidloes                             | 10 0 0   | 5 1/2    | 5 1/2     | 3 12 6      | 0 5 0      | Oct. 1872  |  |  |
| 3000                    | W. Chiverton, c, Perranzabuloe                 | 27 3 9   | 8 1/2    | 8 1/2     | 638 10 0    | 1 10 0     | Aug. 1872  |  |  |
| 2048                    | West Wheel Frances, c, Illogan                 | 5 2 6    | 21       | 15 20     | 11 1 6      | 0 6 0      | Nov. 1873  |  |  |
| 512                     | Wheel Basset, c, Illogan                       | 5 2 6    | 21       | 15 20     | 82 3 0      | 0 10 0     | May 1872   |  |  |
| 4296                    | Wheel Kitty, c, St. Agnes                      | 5 4 6    | 9        | 7 8       | 14 5 6      | 0 1 0      | Jan. 1873  |  |  |
| 806                     | Wheel Margaret, c, Uny Lelant                  | 13 17 6  | 3        | 2 1/2     | 74 5 6      | 0 4 0      | Aug. 1872  |  |  |
| 10000                   | Wheel Mary, c, St. Dennis                      | 5 0 0    | 1 1/2    | 1 1/2     | 522 10 0    | 4 0 0      | Aug. 1872  |  |  |
| 1024                    | Wheel Mary Ann, c, Menheniot                   | 10 0 0   | 160      | 125 150   | 0 2 0       | 0 2 0      | June 1871  |  |  |
| 80                      | Wheel Owles, c, St. Just                       | 70 0 0   | —        | —         | 256 5 0     | 0 10 0     | Oct. 1873  |  |  |
| 12000                   | Wheel Russell, c, Tavistock                    | 1 0 0    | 15       | 13 15     | 0 1 0       | 0 1 0      | Jan. 1873  |  |  |
| 1358                    | Wheel Seton, c, Camborne                       | 73 0 0   | —        | —         | 0 1 6       | 0 1 6      | May 1873   |  |  |
| 15000                   | Wheel Tregoes, c, St. Roche                    | 1 0 0    | —        | —         | 52 9 0      | 0 2 6      | Mar. 1872  |  |  |
| 10000                   | Wheel Whisper, c, c, Warleggan                 | 1 0 0    | —        | —         |             |            |            |  |  |
| 25000                   | Wicklow, c, c, Wicklow                         | 2 10 0   | 3        | 2 1/2     |             |            |            |  |  |

| FOREIGN DIVIDEND MINES. |   |        |          |           |              |            |            |  |  |
|-------------------------|---|--------|----------|-----------|--------------|------------|------------|--|--|
| Shares.                 | Mines.                                    | Prind. | Last Pr. | Clos. Pr. | Total divs.  | Per share. | Last paid  |  |  |
| 355000                  | Alamillos, c, Spain                       | 2 0 0  | 2 1/2    | 1 1/2     | 1 19 0       | 0 2 6      | Mar. 1873  |  |  |
| 30000                   | Atacama and Tiritio Consol, c             | 1 0 0  | 1        | 5 1/2     | 0 4 3        | 0 1 0      | May 1873   |  |  |
| 20000                   | Australian, c, South Australia            | 7 7 8  | 1 1/2    | —         | 0 11 6       | 0 2 0      | July 1873  |  |  |
| 10000                   | Battle Mountain, c, (6240 part pd.)       | 5 0 0  | —        | —         | 0 10 0       | 0 10 0     | Nov. 1872  |  |  |
| 15000                   | Ridley Creek, c, California               | 4 0 0  | 3 1/2    | 2 1/2     | 0 9 0        | 0 2 0      | July 1873  |  |  |
| 6000                    | Bensberg, c, Germany                      | 10 0 0 | 9        | 8 9       | 0 17 4       | 0 8 0      | July 1873  |  |  |
| 12500                   | Burra Burra, c, So. Australia             | 5 0 0  | —        | —         | 56 0 0       | 0 10 0     | Oct. 1872  |  |  |
| 20000                   | Cape Copper Mining, c, So. Africa         | 7 0 0  | 28 1/2   | 27 1/2    | 14 5 0       | 0 2 6      | July 1873  |  |  |
| 4000                    | Cedar Creek, c, California                | 5 0 0  | 2 1/2    | 2 1/2     | 0 5 0        | 0 2 6      | July 1869  |  |  |
| 30000                   | Central American Association              | 0 15 0 | —        | —         | 0 6 0        | 0 1 0      | July 1869  |  |  |
| 1500                    | Chicago, c, Utah                          | 7 0 0  | —        | —         | 0 16 0       | 0 4 0      | Sept. 1873 |  |  |
| 21000                   | Colorado Terrible, c, Colorado            | 5 0 0  | 4 1/2    | 3 1/2     | 0 8 0        | 0 2 0      | Oct. 1871  |  |  |
| 74192                   | Don Pedro North del Rey                   | 0 16 0 | 3 1/2    | 3 1/2     | 2 5 0        | 0 2 0      | Mar. 1872  |  |  |
| 23500                   | Eberhardt and A. Arora, c, Nevada         | 10 0 0 | 4        | 3 1/2     | 1 0 0        | 0 1 0      | July 1871  |  |  |
| 2352                    | Elmer, c, Nova Scotia                     | 10 0 0 | —        | —         | 2 5 0        | 0 15 0     | June 1873  |  |  |
| 60000                   | Emma, c, g, s, Utah (25,000 fully pd.)    | 20 0 0 | 3 1/2    | 2 1/2     | 3 12 0       | 0 6 0      | Dec. 1872  |  |  |
| 70000                   | English and Australian, c, St. Aust.      | 2 10 0 | 1 1/2    | 1 1/2     | 2 7 3        | 0 2 6      | Mar. 1873  |  |  |
| 15000                   | Ferguson, c, California                   | 2 0 0  | —        | —         | 0 4 0        | 0 3 0      | April 1872 |  |  |
| 80000                   | Flagstaff, c, Utah                        | 10 0 0 | 3 1/2    | 2 1/2     | 4 2 0        | 0 2 0      | July 1873  |  |  |
| 20000                   | Fortuna, c, Spain                         | 2 0 0  | 5 1/2    | 5 1/2     | 3 19 4       | 0 5 0      | Dec. 1873  |  |  |
| 30000                   | Gold Run, c, Australia                    | 1 0 0  | —        | —         | 0 2 4        | 0 2 4      | Oct. 1872  |  |  |
| 50000                   | Gr. Pacific Mining Co. Australia          | 1 3 0  | 1 1/2    | 1 1/2     | 0 14 0       | 0 2 6      | July 1873  |  |  |
| 80000                   | Last Chance, c, Utah                      | 5 0 0  | 1 1/2    | 1 1/2     | 0 11 6       | 0 1 6      | Mar. 1873  |  |  |
| 15000                   | Llaneros, c, Spain                        | 3 0 0  | 4 1/2    | 3 1/2     | 0 5 0        | 0 5 0      | Dec. 1872  |  |  |
| 7837                    | Llaneros, c, Spain                        | 3 0 0  | 4 1/2    | 3 1/2     | 11 11 6      | 0 1 6      | Mar. 1873  |  |  |
| 5000                    | Mammoth Copperworks of Utah, c            | 10 0 0 | —        | —         | 0 5 0        | 0 5 0      | Dec. 1872  |  |  |
| 18000                   | Mountain Chief, c, Utah                   | 10 0 0 | —        | —         | 0 4 0        | 0 4 0      | Jan. 1873  |  |  |
| 10000                   | Ponting Mining & Ironworks, c, c          | 30 0 0 | —        | —         | 0 6 0        | 0 3 0      | July 1873  |  |  |
| 10000                   | Port Phillip, c, France                   | 20 0 0 | 21       | 19 21     | 14 16 11     | 1 5 0      | Dec. 1873  |  |  |
| 100000                  | Port Phillip, c, France                   | 20 0 0 | 21       | 19 21     | 1 8 0        | 0 1 0      | Jan. 1872  |  |  |
| 44000                   | Richmond Consols, c, Nevada               | 5 0 0  | 6 1/2    | 5 1/2     | 1 7 6        | 0 10 0     | Jan. 1874  |  |  |
| 125000                  | Scottish Australian Mining Co.            | 1 0 0  | 2        | 1 1/2     | 12 per cent. | Nov. 1873  |            |  |  |
| 112500                  | Sierra Buttes, c, California              | 2 0 0  | 2 1/2    | 2 1/2     | 1 8 0        | 0 2 0      | Dec. 1873  |  |  |
| 60000                   | South Aurora, c, Nevada                   | 5 0 0  | —        | —         | 0 14 2       | 0 2 0      | Nov. 1873  |  |  |
| 15000                   | Swanland Creek, c, California             | 4 0 0  | 5 1/2    | 4 1/2     | 2 8 0        | 0 5 0      | Dec. 1873  |  |  |
| 20000                   | Tolima, c, g, s, (6000 sh. are £5 f. pd.) | 4 0 0  | 4        | 3 4       | 0 5 0        | 0 5 0      | Nov. 1872  |  |  |
| 800                     | Wetherhall, c, c, Prussia                 | 20 0 0 | —        | —         | 26 10 0      | 5 0 0      | Dec. 1872  |  |  |
| 15000                   | Western Andes, c, (5000 £5 f. pd.)        | 3 10 0 | 4 1/2    | 3 1/2     | 0 8 7        | 0 1 9      | Jan. 1874  |  |  |

| NON-DIVIDEND FOREIGN MINES. |   |         |          |           |                 |                            |  |  |  |
|-----------------------------|---|---------|----------|-----------|-----------------|----------------------------|--|--|--|
| Shares.                     | Mines.  | Paid.   | Last Pr. | Clos. Pr. | Pr.             | Last Coll.                 |  |  |  |
| 50000                       | Anglo Argentine, g, s, * (15 per cent. Preference).....                 | 1 0 0   | —        | 36        | 36              | ..... Fully pd. Sept. 1872 |  |  |  |
| 20000                       | Anglo-Australian, g, s, Victoria*.....                                  | 2 10 0  | —        | —         | —               | ..... Fully pd.            |  |  |  |
| 20000                       | Australian United, g, s, Victoria*.....                                 | 2 10 0  | —        | 34        | 34              | ..... Fully pd. June 1873  |  |  |  |
| 3000                        | Bellavista, s, Peru* (£10 shares).....                                  | 9 10 0  | —        | —         | —               | ..... Fully pd.            |  |  |  |
| 20000                       | Blue Tent, hyl, California.....   | 5 0 0   | —        | 5 1/2     | 5 1/2           | ..... Fully pd. Oct. 1870  |  |  |  |
| 50000                       | Braganza, g, Brazil*.....   | 0 15 0  | —        | —         | —               | ..... Fully pd.            |  |  |  |
| 12000                       | Camp Floyd, s, Utah*.....   | 10 0 0  | —        | —         | —               | ..... Fully pd.            |  |  |  |
| 50000                       | Cesena Sulphur Company, Romanga, Italy*.....                            | 10 0 0  | —        | —         | —               | ..... Fully pd.            |  |  |  |
| 60152                       | Chontales, g, s, Nicaragua* (and 12,542 of £1 15s.).....                | 2 0 0   | —        | 75        | 34 3/8          | ..... Fully pd. Oct. 1872  |  |  |  |
| 6000                        | Clifton, s, Colorado*.....  | 5 0 0   | —        | —         | —               | ..... Fully pd.            |  |  |  |
| 10000                       | Crescent, g, Plumas County, California*.....                            | 10 0 0  | —        | —         | —               | ..... Fully pd.            |  |  |  |
| 100000                      | Culaba, g, Minas Geraes, Brazil*.....                                   | 0 17 6  | —        | —         | —               | ..... Fully pd. June 1872  |  |  |  |
| 10000                       | Douglas, s, Georgetown, Col.....  | 5 0 0   | —        | —         | —               | ..... Fully pd.            |  |  |  |
| 7500                        | East Sheboygan Preference* (40,000 ordinary shares).....                | 2 0 0   | —        | —         | —               | ..... Fully pd. Dec. 1871  |  |  |  |
| 35000                       | Excelsior Hydraulic Gold Washing Co., California*.....                  | 6 0 0   | —        | —         | —               | ..... Fully pd.            |  |  |  |
| 60000                       | Excelsior, g, s, California*.....                                       | 1 0 0   | —        | —         | —               | ..... Fully pd.            |  |  |  |
| 65000                       | Frontino and Bolivia, g, New Granada* <sup>†</sup> .....                | 2 0 0   | —        | 3 1/2     | 3 1/2           | ..... Fully pd.            |  |  |  |
| 50000                       | General Brazilian, g*.....  | 1 0 0   | —        | —         | —               | ..... Fully pd.            |  |  |  |
| 10000                       | Goetzelt Tunnel Co., Georgetown, Col.....                               | 7 0 0   | —        | —         | —               | ..... Fully pd.            |  |  |  |
| 40000                       | Holcombe Valley, g, s, California.....                                  | 1 0 0   | —        | 1         | 1 1/2           | ..... Fully pd. Jan. 1873  |  |  |  |
| 4000                        | Hornachos, * s, l, (£10 shares).....                                    | 7 0 0   | —        | —         | —               | ..... Fully pd. April 1873 |  |  |  |
| 10000                       | Hudson, g, California.....  | 5 0 0   | —        | —         | —               | ..... Fully pd.            |  |  |  |
| 20000                       | Imperial Brazilian Collieries, Brazil*.....                             | 5 0 0   | —        | —         | —               | ..... Fully pd.            |  |  |  |
| 20000                       | I. X. L., g, s, California*.....  | 2 0 0   | —        | 36        | 36              | ..... Fully pd.            |  |  |  |
| 5000                        | Jacobi, g, Nicaragua.....   | 5 0 0   | —        | —         | —               | ..... Fully pd.            |  |  |  |
| 10000                       | Kansas, g, Colorado*.....   | 5 0 0   | —        | —         | —               | ..... Fully pd.            |  |  |  |
| 12000                       | Lanestosa, c, l, z, Viscaya, Spain (£2 shares).....                     | 1 7 6   | —        | —         | —               | ..... Fully pd. Aug. 1873  |  |  |  |
| 165000                      | London and California, g* <sup>†</sup> .....                            | 2 0 0   | —        | —         | —               | ..... Fully pd.            |  |  |  |
| 75000                       | Malabar, g, Colombia* (65000 issued).....                               | 1 0 0   | —        | 35        | 36 3/8          | ..... Fully pd.            |  |  |  |
| 4000                        | Malaga, l, Spain*.....  | 10 0 0  | —        | —         | —               | ..... Fully pd.            |  |  |  |
| 50000                       | Malpaso, g, Colombia*.....  | 1 0 0   | —        | 136       | 36 3/8          | ..... Fully pd.            |  |  |  |
| 12000                       | Menzenberg, c, Honnef, Germany*.....                                    | 5 5 0   | —        | —         | —               | ..... Fully pd.            |  |  |  |
| 14000                       | Montague & Waverley Gold Quartz-Crushing Co., * N. Sect. Allotment..... | 5 0 0   | —        | —         | —               | ..... Fully pd.            |  |  |  |
| 6000                        | Monte Loreto, g, c, Italy.....  | 0 7 6   | —        | 36        | 36 5/8          | ..... Fully pd. Jan. 1874  |  |  |  |
| 18000                       | New Pacific, g, s, California*.....                                     | 5 0 0   | —        | 43 1/2    | 44 1/2          | ..... Fully pd.            |  |  |  |
| 58500                       | Nuevo Quebrado, g, Venezuela*.....                                      | 5 0 0   | —        | 43 1/2    | 44 1/2          | ..... Fully pd.            |  |  |  |
| 60000                       | New Rosario, s, Mexico*.....  | 1 0 0   | —        | 1         | 3 1/2           | ..... Fully pd.            |  |  |  |
| 20000                       | New Zealand Kapanga, g, Coromandel*.....                                | 5 0 0   | —        | —         | —               | ..... Fully pd.            |  |  |  |
| 10000                       | Newfoundland, * l.....  | 10 0 0  | —        | —         | —               | ..... Fully pd.            |  |  |  |
| 20000                       | North American, g*.....   | 4 0 0   | —        | —         | —               | ..... Fully pd.            |  |  |  |
| 50000                       | Panuleillo, c, Chili*.....  | 4 0 0   | —        | 2 1/2     | 36 3/8          | ..... Fully pd.            |  |  |  |
| 80000                       | Pastena United, g, Italy* <sup>†</sup> .....                            | 3 0 0   | —        | 36        | 36 3/8          | ..... Fully pd.            |  |  |  |
| 50000                       | Rio, c, Colombia* (40000 issued).....                                   | 1 0 0   | —        | 5         | 5 1/2           | ..... Fully pd.            |  |  |  |
| 200000                      | Rio Tinto, c, l, Huastla, Spain.....                                    | 5 10 0  | —        | 6         | 5 1/2 6 1/2     | ..... Fully pd. Jan. 1874  |  |  |  |
| 100000                      | Ross & Grande, g, Brazil* (£1 shares).....                              | 0 19 0  | —        | 56 1/2    | 56 1/2          | ..... Fully pd. July 1872  |  |  |  |
| 32500                       | Ruby Consolidated, s, Nevada*.....                                      | 10 0 0  | —        | —         | —               | ..... Fully pd.            |  |  |  |
| 30000                       | Russia, c, Orenburg and Uta* <sup>†</sup> .....                         | 10 0 0  | —        | 3 1/2     | 3 3 1/2         | ..... Fully pd.            |  |  |  |
| 25000                       | San Pedro, c, Chili*.....   | 2 0 0   | —        | 2 1/2     | 1 1/2 2         | ..... Fully pd.            |  |  |  |
| 30000                       | Santa Barbara, * g, Brazil.....   | 0 7 6   | —        | 36        | 36 1 1/2        | ..... Fully pd. Mar. 1872  |  |  |  |
| 10000                       | Saturn, s, Utah*.....   | 5 0 0   | —        | —         | —               | ..... Fully pd.            |  |  |  |
| 15000                       | Silver Plume, s, Colorado*.....   | 1 0 0   | —        | —         | —               | ..... Fully pd.            |  |  |  |
| 37500                       | Snowdrift, s, Colorado*.....  | 2 0 0   | —        | —         | —               | ..... Fully pd.            |  |  |  |
| 2200                        | St. John del Rey, Brazil* <sup>†</sup> .....                            | 100 0 0 | —        | 200       | 192 1/2 197 1/2 | ..... Fully pd. Oct. 1872  |  |  |  |
| 20000                       | Star of Nevada, * s, (12000 issued).....                                | 0 0 0   | —        | —         | —               | ..... Fully pd.            |  |  |  |
| 50000                       | Tecoma, s, Utah.....  | 10 0 0  | —        | 1         | 7 1/2 1         | ..... Fully pd.            |  |  |  |
| 20000                       | Thornhill, g, s, Nevada*.....   | 1 0 0   | —        | 2         | 1 1/2 2         | ..... Fully pd.            |  |  |  |
| 4174                        | United Mexican, s, Mexico* <sup>†</sup> .....                           | 28 7 8  | —        | 2 1/2     | 1 1/2           | ..... Fully pd. May 1868   |  |  |  |
| 14000                       | Utah, g, s, l, Utah* (£5 sh.).....                                      | 4 10 0  | —        | 1 1/2     | 1 1/2 1 1/2     | ..... Fully pd. Oct. 1873  |  |  |  |
| 75000                       | Yorke Peninsula, c, South Australia.....                                | 1 0 0   | —        | 34        | 36 3/4          | ..... Fully pd.            |  |  |  |
| 6000                        | Yucatanmutana, c, South Australia * <sup>†</sup> .....                  | 3 0 0   | —        | —         | —               | ..... Fully pd.            |  |  |  |